The Mining Journal
RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 416.---Vol. XIII.] LONDON: SATURDAY, AUGUST 12, 1843. [Price 6d.

STOCKTON-ON-TEES.—TO TIMBER MERCHANTS, RAILWAY COMPANIES, COLLIERY OWNERS, CONTRACTORS, &c.— Mr. BOWMAN will OFFER FOR SALE, BY PUBLIC AUCTION, at Stockton-on-Tees, on Wednesday, the 23d of August, about THREE HUNDRED LOADS OF AMERICAN ROCK ELM TIMBER, which will be put up in suitable lots for purchasers. The timber is now laying in Messrs. W. Turnbull and Co.'s Timber-yard, near the Tees-bridge, at Stockton, where the sale will take place; to commence at Two o'clock in the afternoon.

Any further information required prior to the day of sale, may be had by applying at the Bishop Auckland and Weardale Railway Office, in Darlington.

Darlington, August 1.

IRON-WORKS FOR SALE.—There will be EXPOSED TO SALE, BY PUBLIC AUCTION, in the Royal Exchange Sale Rooms, Queen-street, Glasgow, on Wednesday, the 13th day of September next, at Two o'clock in the afternoon, at the UPSET PRICE OF FOUR THOUSAND POUNDS, the CESSNOCK IRON-WORKS, at Galston, in Ayrshire, Scotland, comprehending six and a half acres of ground in perpetuity, together with the benefit of a lease of about 800 acres of minerals, of which lease there are thirty-eight years to run; all as laid down in the plans of Cessnock and Killoch estates.

These works are situated about five miles south-east from Kilmarnock, and consist of two blast-furnaces, a high-pressure blowing-engine, three large boilers, air holder, conducting and connecting pipes, water pipes, heating ovens for hot-blast, filling machine, gangways, several weighing machines, with weights, furnace-bars, hammers and tools of various kinds, small waggons, cast-iron tram rails, &c. Also a wright's shop, saw pit, stove, brick-kiln, counting-house, and store house, with furniture, and a range of old houses, all as presently upon the ground held in feu.

The mineral field is very extensive. There are twenty-six feet of coal, a mixture of excellent free and splint, in five separate seams—viz.: the M'Naught coal, three feet; Towartable, six feet; Majors, seven feet; Kil coal, three feet; and Main coal, seven feet. In addition to these, there is a seam of twelve inches of smithy coal, and other thin seams. It is believed these coal underlie 300 acres of land, and the greatest dip of the field will not exceed seventy-five fathoms. They crop out on the lease grounds.

Of limestone there are twenty-one feet—viz.: three feet of blue limestone, and eighteen feet of Cessnock, partly of a fine marble grain quality; also several fathoms of freestone and cannelstone. The fire clay, in the section taken, extends from thirty to forty feet, in seams of one and a half feet, two feet, three feet, four feet, and six feet each. There is a day level to a working of three feet, along with which has been wrought the smithy coal, above alluded to.

There are a great many bands of ironstone of the clay stone quality, very superior, from two inches up to eleven inches in thickness. There can be had several workings of nine inches in the depth of 2 ft. 3 in. to 4 ft. 10 in.; also one working of fourteen inches in the depth of 3 ft. 6 in.; another of fifteen inches in the depth of 5 ft. 6 in. There is also iron ore in the field; six inches in the depth of 4 ft. 6 in. has been wrought. These ironstones can be wrought to a considerable extent, by open cast or by day levels. Black-band ironstone can be had within a short distance of the works.

The whole of the minerals above referred to are on the Cessnock estate, and can be wrought within one mile and a half of the furnaces. The minerals on the Killoch estate, which are considerable, underlie about one-fourth of the lease grounds, and are fully four miles distant from the works.

The lordships exigible are for the ton of 22½ cwt.: coal, 9d.; ironstone, 6d.; limestone, 3d.; fire clay, 3d. The entire cost, including these lordships, of the coal, limestone, and ironstone, laid down at the furnaces, would not exceed—for coal, 2s. 6d. a ton; limestone, 2s. a ton; and for the calcined ton of ironstone, 6s. 6d. a ton.

The capabilities of Cessnock Iron-Works for water-power are very considerable. A reservoir of several hundred acres could be formed in the moors about five miles from the works, where the land is of little value. There is a fall at the works upwards of ninety feet, which, with the use of Whitelaw and Stirrat's patent water-mill, would give a large amount of available water-power at a small cost. This, with the large field of minerals, will enable the manufacture of pig and bar-iron to be carried on to a great extent.

The value of these works and lease are greatly enhanced since the opening of the railway from Glasgow to Kilmarnock; there is also a line of railway from Kilmarnock to Troon, and it only requires a continuation for five miles from Kilmarnock to Cessnock Works to complete the transit by railway to Glasgow, or to the coast and harbour of Troon. This branch line of railway has been in contemplation for some time, and his Grace the Duke of Portland, who is proprietor of the estates of Cessnock and Killoch, has in his own hands nearly the entire property necessary for its formation.

Further particulars may be learned on application, personally, or by letter, to Mr. Robert Boyd, merchant, Paisley, trustee on the estate of the Cessnock Iron Company; or to Mr. Andrew Millar, writer, Paisley, who is in possession of the title deeds, maps, and plans of the lease and feu grounds, and of the articles of roup.

Galston, August 1.

BRISTOL IRON-WORKS.—FOR SALE, BY PRIVATE CONTRACT, the BRISTOL IRON-WORKS, possessing the very first-rate TOOLS and CAPABILITIES for every description of ENGINEERING WORK.

THE BEDMINSTER SHIP YARD,

Presenting FACILITIES for the CONSTRUCTION OF IRON OR TIMBER VESSELS, or both, to an unlimited extent; and

THE BATHURST CHAIN WORKS,

Admirably ADAPTED, by arrangement and position, for the SUPPLY of SHIPPING in ANCHORS and CHAINS, and ships' smith work generally, and affording, either collectively or separately, singular opportunities for all or any of these branches of manufacture.—These properties may be purchased on reasonable terms.

For particulars apply to Mr. T. R. Hurton, official assignee; or John Earle Heberfield, solicitor.—Bristol, July 18.

SOHO STEEL WORKS.—TO BE LET, with immediate possession, either for a term of years or from year to year, the ACCOUNTING-HOUSE, WAREHOUSES, and SHOPS, at Soho, in the county of Stafford, in which the Soho Steel Trade has been carried on for upwards of eighty years; with the use of engine power for the purposes of the manufactory.—These premises are situated about two miles from the centre of Birmingham, and, being out of the parish, the poor rates are low.

For rent, and other particulars, apply to Mr. Joseph Westley, of Soho, or to Messrs. Ingleby, Wragge, and Cope, solicitors, Bennett's-hill, Birmingham.

PANKLIBANON IRON-WORKS, adjoining the BAZAAR, 58, Baker-street, Portman-square, London.—Gentlemen about to furnish will find the largest assortment of GENERAL FURNISHING IRONMONGERY ever offered to the public, consisting of tin, copper, and iron cooking utensils;—Table cutlery, best sheffield plate, German silver wares, papier mâché tea trays, tea and coffee urns, stoves, grates, kitchen ranges, fenders, and fire irons, with baths of all kinds, shower, hot, cold, vapour, plunging, &c.; together with ornamental iron and wire work for conservatories, lawns, &c., garden engines, which are constantly kept on hand by the proprietor of this establishment, and in the largest quantities. All articles are selection of the very best description, offered at exceedingly low prices for cash only; and the price of each article being marked in plain figures, and the building itself a public bazaar, or lounge, the public can walk and make their observations and selections according to their wishes, affording advantages which are rarely offered.—Silvester's patent and other radiating stoves, grates.

PATENT ELASTIC (CAOUTCHOUC) PAVEMENT COMPANY.—OFFICE, 12, LOMBARD-STREET, LONDON. This company having now completed such arrangements for the manufacture of this pavement as will enable them to execute orders to any extent, beg to submit the following observations to the notice of the Nobility and Gentry:—This pavement is composed of caoutchouc, combined, by mechanical means, with [illegible] materials; for which method, as well as for its application to the purposes of paving, patents have been secured. The composition thus made forms a firm, substantial, and elastic pavement, which has borne without injury the severest tests of pressure, and of wear and tear.

Caoutchouc (India rubber), from its extreme elasticity, has been proved by scientific and practical men to form the very best material that has hitherto been introduced for paving stables, court yards, basements, and foot-paths—for preventing the ascent of unwholesome effluvia from the vaults of churches, or other buildings exposed to the action or emitting gases—for preventing the noise which, in large rooms devoted to religious or civil assemblies, is found so serious an impediment and inconvenience—for prisons, hospitals, asylums, &c., where the prevention of damp is so essentially necessary for the preservation of health—for [illegible] walls—for a protective covering to [illegible], especially where they are liable to be destroyed by the worm—and for rendering roofs, arches, vaults, &c., impervious to wet.—As rats and other vermin cannot possibly penetrate it, it is well adapted for the floors of granaries and malt-houses, as also for the yards of distillers and brewers, where it will effect a great saving in the wear of casks. But for the floors of stables it is superlative, from its evenness of temperature, its resistance of humidity, its soft elastic turf-like feel, and its non-liability to fracture and throw up sharp angles (like brick, stones, or Dutch clinkers, usually employed), sometimes to the serious injury of the horses. In addition to which advantages, when employed as a flooring material for stables, that of the great saving in litter effected by it, is one of great importance, as well as the saving in shoes, and altogether promoting a great degree of ease and comfort to the horse, which has never yet been approached by any other material. It is devoid of smell, is laid down cold, in blocks, [illegible] tiles, varying from one eighth to three inches in thickness, cemented together at the edges, so that the whole forms one piece, without a joint, and may be cleansed of mud gravity as the situation to which it is applied shall render desirable. It is so elastic it will not fracture with the heaviest blow, a property which will prevent the great loss by wear and tear to which other materials are subject. It can be altered, repaired, or rolled, at a small expense.

CHELSEA WATER-WORKS.—Several SHARES for SALE. Apply to Messrs. John Chalmers and Co., brokers, 14, Old Broad-street.

MINE MATERIALS.—FOR SALE, BY PRIVATE CONTRACT, at WHEAL UNY MINE, near Redruth, the following MINE MATERIALS, the greater part of them NEARLY NEW—viz.: an excellent 70-inch cylinder STEAM PUMPING ENGINE, with bob, three boilers, &c., complete (for its duty see "Lean's Reports"); large capstan and shears, capstan rope, 120 fms.; TWO DRAWING MACHINES, complete—one with 27-feet water-wheel, 3-feet breast, and twelve head stamps attached, the other 22-feet wheel, 3½-feet breast, and eight head stamps; six 20 feet water-wheels, three 21-feet, and two 18-feet—ten of these working eight head stamps each, the eleventh four heads; new iron axle for wheel, with two cog-wheels and axle attached for twelve head stamps; twenty-one 20-inch pumps, nineteen 19 inch, eleven 13-inch, seven 14-inch, and a few of smaller size; 18, 11, and 8 inch working barrels; 21, 19, 15, 14, 12, and 11-inch door pieces and doors; 21, 18, 12, and 11 inch plunger poles; 22 inch plunger case; 21, 19, and 15-inch H pieces, and doors; windbores, various sizes; staples, and glands; two horse-whims; machine and horse whim kibbles; rod plates; sixty-six stamps, lifters, and heads, including eight iron lifters; wood sheds and floors; buddles, frames, trunks, kieves, hatches, sieves, &c.; burning-house materials, smiths' bellows, boring-machine, blocks, and many other articles, including counting-house furniture.—For viewing the above, apply on the mine; and, to treat for the same, to Edward A. Crouch, Liskeard.—1st of 8th month, 1843.

N.B.—The Hayle Railway passes through Wheal Uny, and affords ready access to a shipping port.

MINERALS TO LET.—TO BE LET, the MINES and MINERALS of IRON ORE under PARKS ESTATE, in Frizington, in the county of Cumberland, the property of the Baroness de Sternberg, and now rented by J. H. Attwood, Esq.—For particulars apply to Messrs. Armitstead and Musgrave, solicitors, Whitehaven.

TO BE SOLD, a SLATE QUARRY, that has never been worked, and lately discovered (the rock to be seen on the surface), within four and a half miles to the shipping port of Carnarvon, and only about 300 yards from a good road, about half a mile in length, leading into the turnpike-road. The expense of carriage would not exceed 4s. per ton. There is every advantage to erect machinery, to be worked by water, and a great depth for rubbish a few yards' distance. The purchasers may have a lease of twenty-one years, or fifty-one years certain, and three lives; and may also have the farm, at an annual rent (which is also held under a lease), containing about eighty acres of land, and about eighty acres of common allotted to the same. The purchasers may pay down an instalment of the purchase-money, as shall be agreed upon by the parties; and should the purchaser or purchasers think it advisable to discontinue the working of the said quarry, after laying out a certain sum, to be named by the vendors, in erecting machinery, &c., working the same in a proper manner, they may then give the same up to the vendors, and they would require no further remuneration than the first instalment, and the works as they then shall be, together with the machinery and materials, &c., erected thereon.—Royalty, one-ninth of clear profits.

The above quarry has been partly opened, and the rock turns out most excellent. Apply to Boaz Pritchard, Carnarvon, North Wales.—May 31.

CORNWALL.—A MOST VALUABLE MINING INVESTMENT.—TO BE SOLD, BY TENDER, the FEE-SIMPLE and INHERITANCE of ONE MOIETY of that desirable ESTATE, called TRETOIL, situate in the parish of Lanivet, near Bodmin, Cornwall, the property of Miss Heawood. The surface is a divided moiety of the whole estate of Tretoil, consisting of a dwelling house, out houses, an orchard, and about forty acres of good arable, meadow, and pasture land (with a right to the common moor), now in the occupation of Mrs. Spargo, as tenant thereof. The minerals and metals are an undivided property, extending through the entirety of the estate of Tretoil, including Mr. Edward Johns's tenement. About four years since a rich copper lode was discovered on the premises, and the proprietor granted a sett of her moiety of this mineral for a term of years, subject to certain covenants, premiums, dues, &c. More recently, exceedingly rich lodes of cobalt and tin have been discovered, but no sett for any other than copper has yet been granted, consequently these new lodes have been stopped working; but, in case the property be not sold, the proprietor will be ready to grant a sett of those, and the remainder of the minerals. The prospects of the mine are exceedingly good.

The tenant will show the premises, and for further particulars apply to Mr. H. Heawood, 2, Rosewin-row, Truro, by whom tenders will be received until the 2nd of September; soon after, the person whose tender which shall be accepted, will have due notice thereof.—Dated August 8.

IMPORTANT TO MINERS, SMELTERS, AND ALKALI MANUFACTURERS.—The PLYMOUTH PATENT ALKALI COMPANY are now PREPARED to GRANT LICENSES under their PATENT, for "Improvements in Treating Ores and other Minerals, and in obtaining various Products therefrom; certain parts of which improvements are applicable to the manufacture of alkali."—For information apply to the secretary, J. E. Square, Esq., Plymouth; or to Mr. H. English, *Mining Journal* Office, 26, Fleet-street, London.

COMBMARTIN AND NORTH DEVON LEAD AND SILVER MINES.—Notice is hereby given, that the GENERAL ANNUAL MEETING of the shareholders in the above concern will be held at the counting-house, on the mine, on Wednesday, the 16th day of August next, at Twelve o'clock at noon.

WILLIAM NEWTON, Secretary.

Combmartin Mine, July 29.

MINING OFFICES.—MR. THOMAS IRVING HILL, No. 4, CASTLE-COURT, BIRCHIN-LANE.

The object which this establishment has in view is that of the PURCHASE AND SALE OF MINING PROPERTY, as well as affording ACCURATE INFORMATION ON ALL SUBJECTS CONNECTED WITH CORNISH MINES.

Mr. Hill's connections in Cornwall are well known; and he is, moreover, permitted to refer parties in London, who may be unacquainted with him, to his relatives, Messrs. Pascoe Grenfell and Sons, Upper Thames-street.—July 7.

MINING OFFICES.—Mr. H. B. RYE having, for many years, taken an active part in the offices of the late Capt. Thomas Teague, of Redruth, begs to acquaint the friends of that gentleman, as well as his own connection, that he has ENTERED on BUSINESS as MINE, SHARE, and GENERAL AGENT. The information necessarily acquired relating to mining operations and accounts, by his residence in Cornwall, render him, he flatters himself, competent to the execution of any commission with which he may be entrusted.

Mr. RYE has, at present, COMMISSIONS for the SALE and PURCHASE of SHARES in some of the PRINCIPAL MINES in Cornwall.—A REGISTRY BOOK will be kept of all TRANSACTIONS.

*** OFFICE, [illegible], BUCKLERSBURY, LONDON.

MR. JOHN KYMER'S PATENT FURNACE, whereby an ECONOMICAL APPLICATION of FUEL is EFFECTED, with RAPID EVAPORATION, and WITHOUT SMOKE.—A furnace, on this construction, is erected, and at work, at Messrs. Tabby and Co.'s, 45, Minories, where it may be seen, by cards, to be had on application to Mr. J. M. Bazely, 71, Cornhill, or Mr. H. English, *Mining Journal* Office, 26, Fleet-street.

SMOKE NUISANCE.—ECONOMY OF FUEL WITHOUT the NUISANCE from SMOKE, by C. W. WILLIAMS'S ARGAND FURNACE.—The principle of this furnace consists in the mode by which the air is introduced to the gaseous matter evolved from coal, whereby a more perfect combustion of the constituents is effected, the process being conducted on true chemical principles as explained by Mr. Williams, in his *Treatise on the Combustion of Coal*. A furnace constructed on this principle may, by permission, be daily seen in action at the Water-works, Soho-street, and Manchester Railway Station, Edge-hill, Liverpool.

For further information, apply to Hewes and Co., agents, 5, Town-hall-buildings, Cross-street, Manchester.

SIR W. BURNETT'S PATENT.—REMOVAL OF OFFICES TO 18, KING WILLIAM-STREET, LONDON-BRIDGE.—Nearly nine years' trial of Sir William Burnett's Patent, in all climates, has incontestably proved that it is the most efficacious preservative of timber, canvas, cordage, cotton, woollen, &c., from dry-rot, mildew, moth, and premature decay, that has hitherto been discovered. The process is as cheap as it is efficacious; and the public are respectfully invited to examine the numerous specimens and testimonials at these offices, as above, where every information upon its objects and application will be given.—Timber, planking, hop-poles, wine butts, casks, rick cloths, cordage, and linen and woollen substances will be durably preserved from decay.

Its extraordinary properties have induced the Government to adopt the process very largely in her Majesty's Dockyards at Chatham, Plymouth, and Portsmouth, particularly in the last named place, where a hydraulic apparatus capable of saturating twenty loads of timber at a time, has been erected, to allow of the most extensive application.—[illegible].

IMPORTANT PATENT IMPROVEMENT IN CHRONOMETERS and WATCHES.—E. J. DENT, of STRAND, who obtained the high distinction of receiving the Government Reward for the unequalled performance of the best chronometer ever submitted to twelve months' public trial, begs to acquaint the public that the MANUFACTURE of his WATCHES, CHRONOMETERS, and CLOCKS, is SECURED to him by THREE SEPARATE PATENTS, respectively granted in 1836, 1840, and 1842.—Silver [illegible] watches, jewelled in four holes, £8 8s. each; in gold cases from £10 to £[illegible] each.—Gold Horizontals, Watch 4, with gold dials, from £[illegible] to £[illegible] each.—Dent's "Azimuths" in his recent work on "Time-keepers," is now ready for circulation.

COLD BLAST ANTHRACITE PIG-IRON.—Mr. D. Mushet, the author of the celebrated Treatise on the "Manufacture of Iron and Steel," who has made a series of most elaborate experiments on this extraordinary iron, in concluding, remarks:—"From these, and the former comparative experiments, it is abundantly evident, that the pig iron now making, with cold blast and anthracite, at the Ystalyfera Iron-Works greatly exceeds in strength, in deflective powers, and capacity to resist impact, any iron at this time manufactured in the United Kingdom."

Ystalyfera Iron Works, Swansea.

RAILWAYS MUST PROGRESS.—A RESIDENCE of twenty years in HULL, and thirteen years in LEEDS, ten of which as Commercial Brokers, and seven as Sharebrokers, ENABLE the UNDERSIGNED to give an OPINION and INFORMATION relative to RAILWAYS IN GENERAL, but especially to those connected with the Northern and Midland Counties, and particularly to such as are in direct communication with this part of the country.—Apply to R. B. Watson and Co., 7, Bond-street, Leeds.

RAILWAY SLEEPERS, POSTS, RAILS, and FENCING.—The SUBSCRIBERS, who are the CONTRACTORS for the supply of LARCH SLEEPERS for the whole line of the Dublin and Drogheda Railway, are again ready to undertake to DELIVER any quantity of PRIME LARCH SLEEPERS, and POSTS and RAILS FOR FENCING, upon MODERATE TERMS, and of any required SCANTLING, at any port, at home or abroad. SCOTT, BROTHERS.

Nursery and Seed Warehouse, Exchange-buildings, Belfast, July 19.

TO RAILWAY COMPANIES and CONTRACTORS, COAL-OWNERS and IRONMASTERS, &c.—BRYANT, JAMES, and MAY, beg to acquaint the above named, and consumers of grease generally, that they have constantly on sale GREASE of various qualities, prepared for every description of work, from the fastest passenger carriages to the ballasting waggons. The highest testimonials can be given of quality; prices very moderate.—Orders may be addressed, and samples and particulars obtained, at 15, Philpot-lane, London.

BRISTOL AND EXETER RAILWAY.—Notice is hereby given, that the next HALF-YEARLY GENERAL MEETING of the proprietors of this company will be held, in pursuance of the Act of Parliament, at the White Lion Hotel, in the city of Bristol, on Wednesday, the 23d of August, at Eleven o'clock.—The chair will be taken at Twelve o'clock precisely.

FREDERICK RICKETTS, Chairman.

The transfer books will be closed on Saturday, the 12th of August, and not be re-opened until after the said general meeting, on the 23d of August.

By order of the board of directors,

Bristol, Office, 20, Broad-street, August 4. J. B. BADHAM, Secretary.

HAYLE RAILWAY COMPANY.—Notice is hereby given that a HALF-YEARLY GENERAL MEETING of proprietors in the Hayle Railway Company will be held at this office, on Thursday, the 31st day of August inst., at One o'clock precisely, pursuant to the provisions of the Act of Parliament.

4, New Broad-street, August 8. R. H. PIKE, Secretary.

EASTERN COUNTIES RAILWAY COMPANY.—FOURTEENTH GENERAL MEETING.—Notice is hereby given, that, in pursuance of the Act of Incorporation, the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be held at the Company's Station, Shoreditch, London, on Thursday, the 24th day of August inst., at One o'clock precisely, for the purpose of receiving a report from the directors of the progress of the undertaking, and for the transaction of other business.

The transfer books of the company will be closed on Monday, the 14th inst., and will not be opened until Friday, the 25th inst.

HENRY BOSANQUET, Chairman.

THEODORE W. RATHBONE, Deputy Chairman.

Offices, Shoreditch Station, August 1.

N.B.—The dividend on the old and new shares for the half-year ending the 4th of July last will be payable to those proprietors who shall be registered in the company's books on the 14th of August inst.

EASTERN COUNTIES RAILWAY EXTENSION.—At a numerous and influential meeting, held at the Town Hall, Ipswich, on Tuesday, the 8th of August, 1843, the MAYOR in the chair, the following resolutions were adopted:—

Proposed by the High Sheriff.

1. Resolved, that, in the opinion of this meeting, the formation of the Eastern Counties Railway as far as Colchester has been found of great advantage to this town and district; that the proprietors and promoters of that undertaking are entitled to our sincere thanks; and that the extension thereof to Norwich, by way of Ipswich, with branches from the main line to Harwich Harbour and Bury St. Edmunds, would be a further great public, as well as local, convenience—due consideration being had to private and public interests.

Proposed by C. Colchester, Esq.

2. That the plans, sections, and estimates, prepared by Mr. William Tierney Clark and Mr. Peter Bruff, and submitted to this meeting, appear to have been prepared with much care, skill, and judgment; and the line and branches, as laid down by them, well adapted to give the ports of Ipswich and Harwich, as well as the surrounding districts, the full benefit of railway communication with the metropolis, and also with the inland districts.

Proposed by Mr. Jonathan Abbott.

3. That, from the statements made to this meeting, as to the facility and economy with which the earth-works may be constructed, and as to the expected traffic on the line, it appears to this meeting that the undertaking would be remunerative to the parties promoting it; and, as it would be especially advantageous to the interests of the present Eastern Counties shareholders, the concurrence and co-operation of the directors of that company are earnestly solicited.

Proposed by Jeremiah Head, Esq.

4. That a provisional committee be appointed for the purpose of taking the necessary measures for advancing the undertaking, as they may see fit; and that the following gentlemen be on such committee, with power to add to their numbers, and to appoint a chairman and vice-chairman, and such sub-committee as they may deem necessary—viz.:

R. Long, Esq., High Sheriff of Suffolk.	Mr. Jonathan Abbott.
The Mayor of Ipswich.	John Cobbold, Esq.
The Mayor of Norwich.	J. C. Cobbold, Esq.
The Mayor of Bury St. Edmunds.	Mr. John Footman.
The Mayor of Harwich.	J. Chevallier, Esq.
The Mayor of Eye.	Jeremiah Head, Esq.
R. D. Alexander, Esq.	Charles May, Esq.
	Wm. Rodwell, Esq.

Proposed by James Ransome, Esq.

5. That a fund be provided for discharging the preliminary expenses to be hereinafter incurred, and that the same be paid into the banks of Messrs. Alexanders and Co., or Messrs. Bacon and Co., Ipswich—to be drawn upon only by the chairman or vice-chairman, and two other members of this committee; and that any donations paid be considered and taken as payments on account of any shares which may be afterwards subscribed for by the parties making such donations, in case they should become shareholders.

Proposed by W. H. Alexander, Esq.

6. That these resolutions be advertised in the Ipswich, Colchester, Norwich, and Bury papers, and in the *Railway Times*, *Railway Magazine* and the *Mining Journal*; and that copies be sent to the Members of Parliament for the counties of Essex, Suffolk, and Norfolk, and the boroughs within the same, with a request that they would have the kindness to support the measure when introduced into Parliament.

Proposed by J. C. Cobbold, Esq.

7. That the thanks of this meeting be given to the Mayor for his kindness in calling and presiding at it, and to the High Sheriff of the county for attending it.

RAILWAY MEETINGS of the WEEK.—The "RAILWAY TIMES" of this day, Saturday, the 12th August, with a GRATIS STAMPED SUPPLEMENT of six quarto pages, contains full and ample REPORTS, with the whole of the official documents, of the important RAILWAY MEETINGS of the WEEK, including the London and Birmingham, London and Brighton, Northern and Eastern, North Midland, Midland Counties, York and North Midland, Newcastle and Darlington, &c. OFFICE—122, FLEET-STREET.

**THE BOCCIUS LIGHT.—The PATENTEE is now prepared to SUPPLY BURNERS to the public—1 inch (similar to 2, 3, and 4) inches [illegible] rings; the smaller sizes being adapted for the lighting of shops, counting-houses, &c., and the larger sizes for the illumination of public institutions, halls, churches, chapels, and public thoroughfares. The gas used is the common gas, which is burned on a new principle, so that no change is [illegible] to the [illegible] all expense for the introduction of gas into private houses, and the [illegible] advantages of [illegible] are [illegible] so used. The ECONOMY ranges from THIRTY-FIVE to EIGHTY PER CENT. upon the respective burners, as they increase in size; and the extreme brilliancy and illuminating power obtained exceed any hitherto known. One of the desired advantages offered by the Boccius Light is—its extreme simplicity; the burner has only to be screwed on to the common gas fittings for immediate use.

Full particulars may be obtained on application (between the hours of Ten and Four daily) at the OFFICE OF THE BOCCIUS LIGHT, 14, DUKE-STREET, ADELPHI, LONDON.—Communications from the "Trade" to be [illegible] or to the manufacturers, F. and C. Osler, Broad-street, Birmingham.

N.B.—The patentee avails himself of this opportunity to [illegible] against SPURIOUS IMITATIONS of his BURNERS, and [illegible] all the burners have the name of the patentee stamped on [illegible] get surface of the rings are made of German silver, and the [illegible] two of more [illegible] dimensions. No other is [illegible] chimneys can be legally used.

SMOKE NUISANCE.

EVIDENCE TAKEN BEFORE THE SELECT COMMITTEE OF THE HOUSE OF COMMONS ON THE SMOKE NUISANCE.

W. A. MACKINNON, Esq. (the chairman), in opening the proceedings, briefly stated the objects to which the attention of the committee should be directed, and the results which he hoped would follow their inquiry—viz., the enactment of some legislative provision, by which the reluctant would be coerced in abiding the atmosphere of our commercial and manufacturing localities from the nuisance of an ever-charged atmosphere, loaded with the unconsumed products of our great furnaces, and alike destructive of the health, cleanliness, and comfort, of their population.

The committee began by the examination of a member of their own body.—WILLIAM BECKETT, Esq., M.P., stated that the nuisance had been so great in the borough of Leeds, that a number of gentlemen had associated for the purpose of discovering a remedy for its abatement. That they had, by advertisement, brought together all those scientific men who had practically been engaged in the same object. The result of their efforts was, that in the Act of Parliament last year brought in for the improvement of the borough of Leeds, a clause was introduced, compelling the manufacturers and others to adopt the best mode yet discovered for the consumption of smoke. That the effect of that clause was, that many had adopted measures, with more or less success, and that a considerable improvement was visible in the atmosphere of Leeds. He said, he would not say that the nuisance could be altogether abated, but that it may be materially diminished; that the means adopted had been at a very trifling expense to the manufacturers. The plans of several patentees had been tried, but he was not prepared to speak to any preference. That the principal feature seemed to be the admitting of atmospheric air to cause the ignition of the smoke or gases. The meeting did not go into the examination of the difference of opinion among medical men on the subject; their object was the mere getting rid of the nuisance. Mr. Beckett said he was not prepared to speak on the diminution of fuel or expense, but he understood, at least, there was no additional expense. Several alterations of furnaces had been done at no expense as low as 15l. or 20l., and have been applied to steam-engine boilers, to dyers', dyn, and woollen mills, &c. He thought it but justice to the manufacturers to say, that they evinced the greatest willingness to adopt any improvement, even at a larger expense, if they could be satisfied of there being any plan that would abate the nuisance. The consultation, he observed, still continues at Leeds, but he was not aware of any particular inquiry now going on.

GEORGE FREDERICK MUNTZ, Esq., M.P., and also a member of the committee, was then examined, and stated that for thirty-five years, as a master manufacturer, he had turned his attention to the subject. He had made numerous experiments on all kinds of furnaces, and all the proposed plans, and that it appeared to him that the safest and cheapest principle was to have an excess of boiler room, and never to have the fire forced in its work—that is, raked up, so as to keep the coal in a quick state of combustion. Few men wish to lay out more money than is necessary, and an additional quantity of boiler room is necessarily an additional expense. The principle of throwing in air has been adopted for years; latterly, the principle has been used very much like that of the Argand lamp, by throwing in air in such small subdivisions as to come more minutely in combination with the smoke. The air was before forced in at one considerable space into the fire; it is now forced in so as to come in contact with the whole at once. The late alterations are on that principle, and I have no doubt have been more successful. Smoke, when generated, will never consume itself—it must come in contact with the oxygen of the air. The carbon contained in the flame is the excess compared with the oxygen already in it. He never heard of smoke being consumed by driving it over the flame, and never found it could be so consumed. You may raise the temperature of the smoke by additional fire, and then a small quantity of air will cause ignition. Fire does not burn smoke, but increases the temperature at which it will burn when it comes in contact with the air. Mr. Muntz said he agreed with the hon. Member for Leeds, that there is no distinction on the part of manufacturers to abate the nuisance. It is important not to combine steam furnaces with other furnaces, lest serious injury be done to parties who cannot help themselves. A steam-engine, in the case of iron-works, must work the other furnaces, and you cannot consume the smoke without destroying, in a measure, the power of those furnaces. In the works for manufacturing iron, glass, or where intense heat is required within a limited space, if you admit air to consume the smoke, it so reduces the draught that you cannot get the necessary heat. It might be a hardship to have a law insisting on having a certain quantity of boiler room to work a steam-engine, though eventually the parties would be no losers. There are individuals, who, to economise capital, have a larger steam engine than they can provide boiler room for, thereby creating a nuisance which is not to their real benefit. The hon. Member maintained that the quantity of boiler room appropriated to the engine was not enough to compensate for the carelessness of the individual who works it; therefore, an excess of boiler room is necessary to prevent that individual from injuriously affecting the public. From experience, there ought to be about half as much more boiler room than is generally appropriated to the engine. "In the experiments I have tried (said the hon. Member), I have found that, with an increase of boiler to that extent, the smoke need be nothing worth notice." *Question.*—"Supposing six feet to be now the area generally given, would you recommend nine instead of six?" *Answer.*—"I would. I do not think eventually the parties would suffer by it, but the contrary." In particular manufactures, smoke cannot be prevented. He had tried all the plans, and never found any that would diminish the quantity of smoke where a certain heat was wanted in a certain space. By long experience, he had found that nothing would answer the public if it was to be constantly troublesome. "If you can get a principle which is simple in its nature, and eventually for the benefit of the parties using it, and when once applied cannot be laid out of use, you gain the advantage you want. I have always found that wherever anything, over so good, requiring regular attention, and an increase of trouble is to be applied, it is sure to fall of being generally carried into effect." With reference to the stirring up the fire, the hon. Member had seen furnaces at work where the hands never move the fire at all. He had never seen an experiment but where the admission of air, without an increased quantity of boiler room, has not only not been a saving, but a loss.

DR. URE was next examined.—The CHAIRMAN observed, that the committee wished to divide the subject under three heads—1st, the feasibility of correcting the nuisance; 2d, the policy of compelling parties to adopt measures for that purpose; and, 3d, the expediency of legislative compulsory enactments.—Dr. URE, in describing the general principles on which combustion proceeds in a furnace, stated, that when coals are thrown on a grate a large quantity of gas is distilled off. These gases require a great deal of atmospheric oxygen to consume them, and their combustion has hitherto been very much overlooked in furnaces. Their consumption has been treated, hitherto, very much to the introduction of air up through the bars of the grate; that that air, producing carbonic acid gas, from its combination with the carbon on the bars, is, nevertheless, quite incapable of burning the gases that occupy the space above the fuel, and in the upper part of the furnace. The attempt to burn these gases, by the air which passes up through the bars (and which he showed was quite incompetent to the purpose), has been, the Doctor observed, "the radical effect of almost all furnaces hitherto;" the consequence was, that this gaseous matter gets too little oxygen, and, instead of burning the carbon and hydrogen, which constitutes the gases, the carbon is deposited in a pulverised form, constituting smoke and soot, and a great deal of it gets half burnt, forming what is well known under the name of carbonic oxide, which is but half-burnt charcoal—charcoal burnt with but half its quantity of oxygen, constituting carbonic oxide. This goes off in an invisible form, and people then say the combustion is complete; in this way, however, only one-half of the heat is got out of the carbon of the coals, and this mixes with the deposited charcoal, or fine soot, and constitutes smoke. With respect to its effect on health, Dr. URE observed, that it was a very important part of the subject, as this invisible gas, resulting from the semi-combustion of the carbon, in the most minute of gases, and more so than the half-burnt charcoal, or carbonic acid. Carbonic acid, we know, when condensed in water, forms a very agreeable beverage—viz., soda water. Carbonic acid is condemnable by sensitive; it leaves the atmosphere, and what remains forms the food of plants. Carbonic oxide, which proceeds from the half-burnt charcoal of the coal, and which passes from our chimneys in an invisible state, in the most minute of gases in the atmosphere; two or three inhalations of it are capable completely of destroying life. This is dangerous, as it may be breathed, and may enter the lungs, but the full burnt charcoal cannot be breathed. The moment it gets to the windpipe, the epiglottis shuts, but the carbonic oxide in a light gas, enters the lungs easily, and is most fatal. This gas, of which so little has been said, as the production of combustion, is much more injurious to the atmosphere, and the health of human, than the gas from full burnt charcoal. This carbonic oxide gas, which is so injurious, is produced by those bad combustions which have been pointed out, and not patronised, and which began with the celebrated James Watt, who thought that, if he could resolve the products of combustion from furnaces invisible, he had accomplished the purpose of burning those products. His confidence was the making the smoke pass over incandescent fuel—that is to say, red hot cinders. He thought, by that means, if he effected the annihilation of the smoke, he had made a great discovery; but, the fact was, as the Doctor described it, that which had been completely burnt in the exterior part of the furnace, and combined into carbonic acid—entering the red-hot cinders, deprived or combined with an immense quantity of their carbon, and became carbonic oxide; that, indeed, is the way they make carbonic oxide. Carbonic acid, passing over red-hot fuel, takes up a second dose of charcoal, and thus, instead of containing of two atoms of oxygen and one of charcoal (which is carbonic acid), it comes out two atoms of oxygen and one of charcoal, which is carbonic oxide. This, the Doctor stated, he considered a very important view of the subject; as, since the period of Mr. Watt, there had been an immense number of patents in the same line for consuming smoke, almost-truths of which consist of this leading principle. Atmospherical air, admitted in a stratum over the coals, chilled their combustion, and precipitated the smoke. In order, then, to get quit of this smoke, he kept the remote end of the furnace covered with red-hot cinders, or coked coal. Thus, the carbonic acid and smoke, getting into contact with those red-hot cinders, became carbonic oxide, and went off invisibly, no doubt, but then it polluted the atmosphere, and the fuel was only half burnt. The error of Watt, then, was admitting too much air in the wrong place, and in too thick a body.

The following portion of the examination of Dr. URE is highly instructive and interesting:—*Q.* One of the erroneous impressions you wish to remove is, that of the noxious quality of the smoke being cured by the annihilation of its blackness? *A.* Just so; you convert the smoke into carbonic oxide gas.—*Q.* And, therefore, persons suppose that, because they remove the colour, they get rid of the evil? *A.* Just so; but I would say that it is better to have a little dust, than to be breathing carbonic oxide.—*Q.* Is not the great object which you have in view to prevent smoke? *A.* Decidedly.—*Q.* Is it not the case, that the more perfect the combustion, the more complete the prevention of smoke? *A.* There is a perfect combustion which prevents smoke, and there is an imperfect combustion which also prevents smoke—I want the perfect combustion.—*Q.* With regard to the perfect combustion, would there not be, not only a prevention of smoke, but a saving of fuel? *A.* That is so.—*Q.* But, when the smoke is once produced, it may, in appearance, be consumed, but that would require an increase of fuel? *A.* That is the case.—*Q.* The gases would not be destroyed, but only covered? *A.* Just so.—*Q.* Then the committee are to understand, that what is called the burning of the smoke is a great error? *A.* It is a great error.

Dr. URE then went on to explain the principles on which the admitted air should be introduced, so as to effect the required perfect admixture of the gas and the air, to insure perfect combustion, and which he stated was by the plan of Mr. C. Wye Williams, and the means of introducing the air through numerous small apertures, so as to effect a more rapid mixture. The effect, as described by Dr. URE, was, that the moment the orifice was opened, and the air admitted in this divided state, if there had been volumes of air the moment before, that smoke instantly vanishes.

[We shall continue this analysis of the evidence as it proceeds; the committee, however, have not yet concluded their investigation, and propose examining Professor Brande and other scientific persons on this important branch of the subject.]

THE NEW STEAM SHIP "BENTINCK."

We were highly pleased, on Tuesday last, by an inspection of this magnificent vessel, which has just been completed for the Peninsular and Oriental Steam Navigation Company, and intended for the communication with India *viâ* the *Red Sea*, to which destination she will start from Southampton on the 24th instant. The *Bentinck* is 250 feet in length from the head to the taffrail, 40 feet in breadth, 31 feet in depth, and admeasures, including the spar deck, 2020 tons; her engines are of 520-horse power, and her cost about 64,000*l.* To guard as much as possible against accidents, she is fitted with water-tight iron bulkheads, dividing the vessel's hold into a number of water-tight compartments. The advantages of this arrangement, first adopted to wooden built vessels by C. W. Williams, Esq., one of the directors of the company, are of a most important nature; besides adding greatly to the strength of the vessel, they effectually prevent her from sinking in case of springing a leak, by striking on a rock, or otherwise, because no more water can enter the vessel, in such a case, than to fill to the water-line the particular compartment in which the leak may happen, and the vessel will, therefore, continue to float nearly as before. One or two recent melancholy instances of extensive loss of life by steam-boat accidents may be pointed out, in which, had the vessels been fitted with the water-tight bulkheads, no loss of life would probably have ensued. Besides the above protection, the *Bentinck* is fitted with the patent paddle-box life boats, which, with her other boats, afford ample means of carrying the whole of the crew and passengers, with provisions and water, in case of accident to the vessel. She has also a complete apparatus, including a powerful force-pump, for extinguishing fire instantaneously in any part of the ship. Another improvement of considerable importance, and deserving of mention, is her being fitted with Mr. Williams's patent smoke consumers, which considerably diminish, or altogether prevent, the issuing of smoke from the funnels. The interior arrangements are on a scale of great splendour, combined with every attention to comfort and convenience; she has accommodations for 103 cabin passengers, consisting of twenty single cabins, twenty-two double cabins, and twelve family and general cabins, with capacious and elegant saloons.

The *Bentinck*, on the whole, reflects the utmost credit on the spirited company to which she belongs, for, besides the improvements we have enumerated, there are several others introduced—one we must especially particularise, that of Mr. Andrew Smith's patent wire rope, which the directors have wisely availed themselves of, not only for economy, but from its acknowledged vast superiority, in every respect, over hempen; we also noticed some life-belts, of either Curtis's or Andrew's manufacture—but the vessel possesses so many attractions as to render it an object particularly deserving the careful inspection of every one interested in the progress of ship-building. We may add, that her average speed on a passage from Dublin Bay to Southampton was thirteen miles per hour, and occasionally she ran fourteen miles per hour—being a higher rate of speed than any other vessel adapted for ocean steam navigation has yet attained.

THE MOTION OF VESSELS CAUSED BY WAVES APPLIED AS A MOTIVE POWER.—A power which has long been vaguely known to exist, but the idea of ever bringing it into use never appears to have been even thought of, is just now being brought under notice by Y. A. Etzler, Esq., who, by means of some very simple machinery, has made the alternating perpendicular motion of a ship, by the power of the waves, subservient to her horizontal motion through the water. To conceive how this power can be brought into action, it is necessary to know, that to whatever height a wave rises, it has no effect on the calm of the water below, further than at a depth equal to its height, and hence it is easy to render the power of waves efficient, by offering them a resistance; for the propulsion of a vessel, this resistance is obtained by connecting a sort of platform placed beneath the undulation of the waves, with the vessel floating in them; at both ends of this platform, and brought up on each side of the vessel, are strong connecting rods, attached to arms working on an axle; to these arms are fixed ratchet rods, working in teeth wheels, connected with the paddles, and at every pitch of the vessel the alternate perpendicular motion causes the paddle-wheels to revolve. This is the most simple application of the power, but, by a proper arrangement of requisite machinery, fly-wheel, &c., the motion of the vessel may be regulated as true as by the steam-engine, and by springs placed in proper parts of the two floating bodies—viz., the vessel and the platform—all danger may be resisted, and concussion rendered harmless. Mr. Etzler calculates that 20 to 30 miles per hour can be easily and safely attained by these means, and that, taking into consideration the duration of calms, when there is always an undulation of the sea, the average rate of velocity on long sea voyages may be estimated at from ten to twenty miles an hour. A perfectly successful experiment has been made off Margate, with the most simple mechanism, and a model is exhibited in the captains' room at Lloyds for public inspection.

INVENTIONS FOR PRESERVATION FROM SHIPWRECK.—As particulars on any subject having for its object the preservation from the dreadful disasters so repeatedly occurring from shipwreck cannot fail proving of universal interest, we readily publish the following extract from a letter obligingly forwarded by a correspondent, to whom we are indebted for many valuable communications:—"Smith's paddle-box boats appear to be excellent things, and I have no doubt if the men were protected with Curtis's life-belts, they would retain that presence of mind so necessary on such dreadful occasions. I am not aware that I have ever seen Mr. Andrew's belts, but I am happy to find that he is turning his attention to this object; if there were 500 manufacturers of them, there would not be one too many, and hundreds and thousands of our gallant seamen who perish the moment they reach the water might be saved. I understand there is a great demand for Curtis's inventions since the dreadful wreck of the *Pegasus*. An officer of the navy has since been saved by his belt, and a gentleman of Dundee rescued by his life-buoy."

METALLIC PACKING RING FOR STEAM ENGINES.—Messrs. Parsons and Benning, of St. Clement-place, Waterloo-bridge, have patented a plan for packing the bores of machinery with metal, instead of the old method of hemp and grease. It is on the principle of different degrees of expansion of different metals. Two concentric rings of different metals, or one of cast and one of wrought iron, are exactly fitted together, each of them having a slit in one part, and the ends then secured are jointed together by a key, and in fitting them on the pistons, care is taken that the slits in the two rings do not come together; by this means, at whatever temperature the steam may be, the metals expand, or contract, in proportion, and always press against the cylinder, with a force varying with the different operations of the engine; with the common ring pistons, springs are obliged to be used, which are continually breaking, while with Messrs. Parsons and Benning's patent metallic packing the heat generated in the interior from which the necessary elasticity is derived.

ST. GEORGE'S STEAM-PACKET COMPANY.—This company is to be dissolved—a resolution to that effect having been passed at the meeting held a few days since at Liverpool, at which it transpired that during the eight years of the company's existence as much as 100,000*l.* had been lost, and that the proprietors, on hearing this, unanimously resolved on an immediate winding up of affairs. The English proprietors have agreed to take them of the company's steam-packets which had not lately been in use, while the Cork proprietors agreed to take those packets which have, for some time past, been plying across the Irish Channel. This it seems that two companies are to arise from the dissolution of the one. A meeting for the purpose of preparing a final report will be held as shortly as possible.

THE MINING INTEREST—BRITISH AND FOREIGN MINES.

The stimulus imparted to foreign adventure in copper mines by the permission first granted almost twenty years ago to smelt foreign ores in bond in this country, followed up last year in the tariff by the admission of foreign copper for home consumption at a small duty, seems likely to prove a dangerous boon to those for whom the interests of the British miner were endangered or sacrificed. While the effect of a glutted market is felt by the miner in a declining standard, it does not appear that the smelter has been materially benefitted. We see that the copper-works of South Wales have just found it necessary to reduce their workmens' wages one-eighth, a circumstance greatly to be lamented, yet a less evil than such further decline in the standard as would endanger the poorer mines. While it thus appears that the admission of foreign copper has not proved a very valuable boon to the smelter, we do not find that the adventurers themselves have much cause to be grateful for the encouragement they received to embark their capital in Cuba and Chili adventures. The Cobre company, the giant of the whole, which has loaded the market with more than one-eighth of the whole quantity of copper sold, and whose sales last year amounted to no less than 220,000*l.*, is not paying a dividend. The capital sunk in this mine is very little short of half a million sterling, of which, at the present price of the shares, more than 200,000*l.* has been lost. The shares, upon which 40*l.* have been paid, and which at the beginning of this year had fallen to 25*l.*, have experienced a further reduction to 23*l.* What they will be, should one or two more half-yearly meetings pass without a dividend, time may show. A mine which swallows 220,000*l.* a-year in expenses is a dangerous property. The Cobre is not the only foreign adventure in the same predicament. The Copiapo, a much smaller concern, indeed, but yet what would be deemed a large mine in England, since the returns last year were within a trifle of 40,000*l.*, is paying no dividends, and at the annual meeting of the shareholders last week it appears that the directors had been seeking relief from Government, either by restoring the permission to smelt the ores in bond (a privilege which was surrendered last year as an equivalent for the admission then given to the home market) or by a reduction of the duty. The application was unsuccessful. Government must have learnt by this time, what the general state of the metal trade is so calculated to teach, that prosperity is not obtained by stimulating production beyond the demand.

It appears from the present state of the market that these foreign mines benefit only the countries in which they are worked, and the agents employed in them. To the home miner they are a serious injury, reducing the price, and thereby stopping the poorer mines. To the smelter they would seem to be no great benefit, since we now find him obliged, in self-preservation, to effect a great reduction in his workmens' wages. To the adventurers themselves they have proved great gulfs to swallow up their capital. Thus it has ever been, and thus we may conclude it ever will be. The mines of Mexico, in which millions of British capital have been sunk within the last twenty years, were not much safer investments to the Spanish adventurers. Now and then a mine would be found to enrich the fortunate proprietors, but the general character of the speculation was hazard and loss. Still more surely must this be the case where the shareholders live in a distant land. Mining can be made profitable only by the constant exertion of the utmost skill and economy; but a foreign adventure, managed as it must be by a direction dependent entirely upon agents thousands of miles off, and obliged to create all the facilities required, and to employ workmen envious and jealous of the foreigner whose bread they eat—or, perhaps, as in Cuba, to avail themselves of the heartless labour of slaves—must be productive indeed, more productive than the general run of mines in any country has ever yet proved, if it cover the costs.—*Cornwall Gazette.*

MINING IN SOUTH WALES.—*(From a Correspondent).*—It is with much regret that we hear of the falling off of some of the mines in South Wales. We have just learnt that Gellisheiron, a mine near Gugnan, is about to be abandoned; a short time since, we were informed that the prospects in this mine had greatly changed for the better, and that it bade fair to rival the best mines in Cardiganshire, and, therefore, lament the more now to hear so unfavourable an account of this concern.

THE IRON TRADE.—*(From a Correspondent).*—A most extravagant misstatement regarding the quantity of iron in stock at Newport was published in the last *Monmouthshire Merlin*, and, lest it should obtain greater publicity from being quoted, it is necessary for you to state, that the stock was taken last week, and the quantity found to be rather under 35,000 tons, including 11,000 tons held by Mr. Attwood on speculation, which is about the average quantity for the port.

BRITISH IRON COMPANY.—In the House of Commons, on Wednesday evening, Mr. J. A. Smith moved the second reading of the bill for the reformation of this company; the hon. gentleman also moved the committee have leave to sit and report on Monday next; to which an hon. Member objected, on the ground of some technical informality.—Mr. Gladstone, however, supported the bill, observing, that the great wealth and respectability of the parties connected with it left no doubt that the bill would be productive of much benefit in the mining districts; he thought, in such a case, it would be well to dispense with the strict observance of the usual rules of the House.—The motion was agreed to.

IMPROVEMENTS IN SEPARATING SULPHUR FROM VARIOUS MINERALS.—Mr. J. E. D. Rodgers, of Ebury-street, Pimlico, has just obtained a patent for separating sulphur from pyrites, &c. This invention is founded on the affinity of hydrogen for sulphur, and oxygen for various metals, and consists in conveying steam through the retort during the calcination of mineral sulphurets. For this purpose, the retort is fixed in the furnace in such manner that steam from a boiler is admitted at one end, while the gases evolved escape at the other. The sulphuretted minerals having been reduced to coarse powder, are placed in the retort, previously subjected to a red heat, and the steam passing into it while the decomposition is going on, the hydrogen of the water unites with the sulphur expelled from the mineral, forming sulphuretted hydrogen; while the oxygen of the water enters into combination with the metal, forming an oxide which is afterwards easily reduced. If the sulphur is to be saved, it is only necessary to carry the connection from the retort into suitable chambers where it can be condensed, but when the object is merely to expel the sulphur, and obtain the pure metal, as in the reduction of silver, and some of the more rich copper, zinc, &c., ores, the most effectual method is to connect the exterior pipe from the retort with the chimney of the furnace, whence all the sulphuretted vapours will be carried off. In the usual process of calcination a sub-sulphate or the metal is formed, which no heat will decompose, but the patentee of this operation is confident he has discovered a process for getting rid of every atom of sulphur, and in some of his experiments on the iron pyrites of Cornwall, he states that he has obtained a *perfectly pure* oxide of iron. The tenacity with which sulphur remains in contact with most of the metals has ever been a source of annoyance and expense to the manufacturer, and should this process of Mr. Rodgers be effectual as his specification (no doubt founded on well tried experiments) describes, it will be of much advantage, not only to the metallurgist, but to the public.

THE EXPORT DUTY ON COALS.—Austria, within these few days, has been added, by the kindness of Ministers, to the list of favoured nations—no mean, curious favoured by having their vessels placed on a perfect equality, as far as the coal duty is concerned, with the commercial marine of this country. The Russian, Prussian, Swedish, Norwegian, and Austrian shipowners can now carry coal to any foreign country whatever, at the same rate of duty that is payable on shipments by British vessels. This is another "prop" knocked from under the Premier's coal tax—a tax which certainly, by this time, must appear, even to a pheasoner's eye, as anything rather than evidence of Ministerial wisdom or financial foresight.—*Gateshead Observer.*

THE MINERAL "SLICKENSIDES."—The mines in Eyam-edge are very deep, and the New-engine mine I have heard stated as being the deepest in Derbyshire. Among the number in the edge is the Hayscliff, a mine distinguished for having contained, in great abundance, that extraordinary phenomenon in the mineral world, provincially called "slickensides." It is a species of galena, and is well known amongst mineralogists. This mine once had it in singular quantity and quality. The effects of this mineral are terrible; a blow with a hammer, a stroke, or scratch, with a miner's pick, are sufficient to blast asunder the massive rocks, to which it is found attached. One writer says, "the stroke is immediately succeeded by a crackling noise, accompanied with a noise not unlike the mingled hum of a swarm of bees; shortly afterwards an explosion follows, as loud and appalling, that even the miners, though a hardy race of men, and little accustomed to fear, turn pale, and trimble at the shock." Of the nature of this mineral, and its terrible power, there have been many, but quite unsatisfactory, solutions. Whitehurst, in his work on the formation of the earth, thus mentions its wonderful power:—"In the year 1742 an explosion took place at the Hayscliff mine, Eyam, by the power of slickensides. Two hundred barrels of materials were blown out at one blast, each barrel containing 200 lbs. weight. During the explosion the earth shook as by an earthquake." A person of the name of Higginbotham once very narrowly escaped with life, by striking inadvertently this substance in the above mine. Experienced miners can, however, work where it greatly abounds, without much danger. It is also known by the name of "crumbling whetin."—*Wood's Derbyshire of Eyam.*

THE BOSWELL LIGHT.—This very beautiful and economical light is, we perceive, announced as being ready for universal adoption. The principle, invented by scientific men of the highest eminence, has been, for many months, conducting a long series of practical experiments, oftentimes repeated, with the view to produce a light perfect in every minute particular, and, at the same time, conceivable for its extreme simplicity and singular economy. The result of those labours has proved most satisfactory, and the public may now avail themselves of the advantages offered them. What those advantages are, the advertisement in another part of our paper briefly indicates. All persons who may be desirous of further information, will, of course, make direct application to the office of the patentee.

PROCEEDINGS OF PUBLIC COMPANIES.

LONDON AND BIRMINGHAM RAILWAY COMPANY.

The half-yearly general meeting of the shareholders was held at the Queen's Hotel, Birmingham, yesterday, and was very numerously attended, several of the largest proprietors, from distant parts of the country, being amongst those present—GEORGE CARR GLYN, Esq. (chairman of the board of directors), in the chair.—RICHARD CREED, Esq., read the report, which furnished the following results of the operations of the company during the last six months:

The receipts were	£390,630 7 10
Expenses (including depreciation of stock, rent of Aylesbury line, &c.)	165,794 3 11
Net profit	£224,834 3 11

As compared with the receipts of the corresponding half-year of 1842, the account stood as follows:—

The passenger traffic was less by	£13,113 16 10
The cattle traffic was more by	10,019 18 7
Making a decrease in traffic of	£3,094 0 3

On the other hand, as compared with the charges of the same half year, there was a reduction in locomotive power, coach traffic, general charges, and depreciation, of nearly 15s. 11d., to which, adding the decrease on interest of borrowed capital, 11,809l. 12s. 9d., gave a total decrease in charge of 20,420l. 8s. 8d. As respected the coach traffic charges it was observed that a sum of 1666l. 7s. 7d. paid by the Midland Counties Company, as their share of the common expenses of the Rugby station for 1841, was deducted from the charge for the half year ending the 30th of June, 1842, and should, consequently, be added to the amount for that half-year, before it was compared with the charge for the half-year ending the 30th day of June, 1843. Deducting the decrease in receipts from the decrease in charges (irrespective of the above sum of 1666l. 7s. 7d.) the balance of net profit was found to have exceeded the amount for the corresponding half-year of 1842 by the sum of 16,821l. 16s. 5d. The balance of profit brought forward from the half year's account, ending the 31st December last, was 6275l. 17s. 5d.; the profit realized by the sale of the remainder of the unappropriated 25l. shares was 11,586l. 7s. 7d., making together 17,861l., which, added to the net profit for the last half-year, 220,834l. 3s. 11d., gave an amount of profit to be divided of 241,695l. 8s. 11d. The directors, therefore, recommended a dividend of 5l. on every 100l. of capital stock (subject to a deduction for income tax, and for interest of capital not paid up), but they reminded the proprietors that of this dividend 4s. 9d. per cent., was derived from profits realized by the sale of the last of the unappropriated 25l. shares.

Looking at the continued depression of trade during the last six months, which had affected their own in common with other lines, the directors could not but regard it as a subject for congratulation, that the company, by the decrease in their expenses, had been enabled to maintain the same rate of dividend as in the two preceding half-years. They also had the satisfaction to report, that the long-pending question of compensation which the Grand Junction Canal Company were entitled to from the London and Birmingham Railway, for loss of surface water at Tring, had been settled by the payment of 5750l. in full of all demands. In virtue of the powers given by the two bills which had passed during the present session, for making the Warwick and Leamington, and Northampton and Peterborough branch railways, the capital of the company might be increased to 7,000,000l., but they had reason to believe that new shares to the amount of 1,250,000l., in addition to the existing capital of 5,500,000l., would be adequate to the total expenditure for the branch lines, and the liquidation of borrowed money. Under this impression, the directors recommended the creation of 55,000 25l. shares, representing a capital of 1,375,000l., to be allotted to the present shareholders, on payment of a deposit of 1l. per share, in the proportion of one new share for every 100l. of capital stock. It was also proposed that these new shares should not participate in any dividend of the company till after the lapse of three years from the 1st of January next, by which time the branch lines would be in full operation. The directors recommended that, under the same powers, they should be authorized to make arrangements for the conversion into a consolidated stock of the existing 100l., 50l., and old 25l. shares, on which all calls had been made and discharged.

The reading of the report was received with much approbation by the meeting, and at the close the CHAIRMAN addressed the shareholders, enlarging on the various topics touched upon in the report, and congratulating them on the position which they were enabled to occupy during the commercial depression which had so materially affected the dividends in similar undertakings. He also announced that the directors had not availed themselves of the increased remuneration for their services, voted at the last meeting, lest their doing so might have exposed their views to misconstruction; and he subsequently intimated that any similar expression of the approbation of the proprietors could only be accepted after due notice of the intention to bring forward the matter had been given, and after it had received the unanimous sanction of the shareholders themselves.—Resolutions, approving of the recommendations of the directors, as contained in their report, were adopted; and, on the motion of Captain WATTS, seconded by Mr. BARNETT, thanks were given by acclamation to the chairman and his coadjutors, and the meeting separated.

LONDON AND BRIGHTON RAILWAY COMPANY.

On Tuesday, the half-yearly general meeting of this company was held at the London Tavern, to receive the report of the new directors, and on other business.—The chair was taken by JOHN M. PARSONS, Esq., who requested the secretary to read the advertisement, and then the report of the directors.

The accounts being in print, and so fully detailed, were not read to the meeting.—It appeared from them, that the cost of the railway was ascertained to be 2,606,340l., which amount would be increased to 2,707,872l. by the following items:—London Bridge Station, 20,000l.; land for temporary purposes, 2500l.; new carriages, waggons, &c., 4700l.; re-ballasting, 11,611l.; contracts, &c., 16,661l.; new buildings, 46,002l.—together, 101,532l. From the 2,707,872l., the sum of 40,933l., for land and buildings, and the amount receivable from the South-Eastern Company (327,334l.), would have to be deducted. The revenue for the half-year was 74,794l. 6s., to which add late balance, 6293l. 2s. 9d., and toll from the South-Eastern Railway Company, 1304l. 13s. 7d., and the total was 81,992l. 2s. 3d., which, after the expenses, left a deficiency of 3304l. 19s. 4d., so that no dividend was proposed.

A long discussion took place on the report, in which Major Beauclerk, Mr. Entwistle, Mr. Wishaw, Mr. Bennett, Mr. Cooper, the Chairman, Mr. Mahon, and others, took part—when it was moved by the CHAIRMAN, and seconded by Mr. BENNETT, that the report be received and adopted, which was agreed to unanimously.—A resolution was passed for the transfer of 366,825l. 10s. 0d. from the hands of the former to the present directors, without any opposition.

The election of a new director, in the place of Mr. Entwistle, resigned, then followed, when Mr. Joseph Thompson was elected, by a large majority.

Major Beauclerk, Mr. Bennett, Mr. Wishaw, and others, complained loudly of the interference of the directors, in proposing a candidate to the meeting, which ought to have been left to themselves.—After a long consultation, the sum of 1100l. per annum was fixed on as a remuneration for the directors.—Another attempt was made for auditors, but no one offered himself.

Sir JOHN SIMPSON moved that his expenses to and from the North should be paid, as being customary in many other railway companies, but it was negatived by a large majority.—Mr. CASH asked, if the report was correct that the directors had given 25l. towards the Brighton races?—The CHAIRMAN said, it was; and, in giving 25l. to the race fund, they thought they were only consulting the interests of Brighton and the railway.—Mr. WISHAW approved of the course, and said he had witnessed a vast increase in the traffic in consequence of the races.—Mr. CASH said, the application of the money to such a purpose was perfectly illegal, and was only countenancing a scene of temptation to drink and immorality. He should not make any motion on the subject, though he knew he should be supported by a large number of the proprietors.—Mr. LEWIS then moved a vote of thanks to the chairman, after passing which, the meeting adjourned.

NORTHERN AND EASTERN RAILWAY.

The half-yearly meeting of this company was held at the joint station, in Shoreditch, on Thursday, the 10th instant, and was not very numerously attended.—In the absence of William Marshall, Esq. (the chairman), the chair was taken by JOHN MILLS, Esq., who requested the SECRETARY (Mr. Bowyer) to read the report of the directors, from which it appeared, that the traffic for the half-year ending the 30th of June had produced as follows:—Passengers, &c., 21,383l. 14s. 3d.; parcels, 462l. 12s. 6d.; goods, 32246l. 2d.—together, 53,871l. 7s. 6d., showing an increase of receipts, as compared with the corresponding half-year of 1842, of 6261l. 14s. 1d. The above amount of receipts, added to the last balance of 12465l. 7s. 1d., and 100l. 18s. 2d. profit on eighty-five unclaimed quarter-shares, made 26,899l. 12s. 4d., from which deducting working expenses, 16,378l. 10s. 5d.; interest, 5696l. 0s. 6d.; toll to the Eastern Counties Company, 1740l. 3s. 7d.; and reserving 3500l. for rent due to the Eastern Counties Company, and 11792l. dividend on 3126 scrip shares, there remained the divisible balance of 6102l. 11s. 10d., out of which the directors recommended a dividend of 12s. 6d. per share on the 9020 original shares of the company, leaving an undivided balance of 3202l. 11s. 10d. The amount paid on the quarter-shares to the 30th of June was 62.7277. 10s. The directors had entered into a contract with Messrs. Grissell and Peto for the construction of the Hertford and Ware branch for the sum of 67,500l., and preparations were making for extending the line to Newport.

Mr. GORDON thought the report very following, but regretted that the expenditure was larger on a smaller traffic than during the last six months of the past year. He also complained of the directors not making any mention of the Act obtained by the Birmingham Company to carry their line to Peterborough, and said this company ought at once to have proceeded on to Cambridge, so as eventually to connect themselves with the Eastern Counties.—The CHAIRMAN said they had opposed the measure to the utmost of their power, but it was all to no purpose.—Mr. MACFARLANE (a director) considered the proprietor that much expense had attended bringing on the goods' traffic, and thought the fairest way would be to compare the coming half year's expenditure with that which had expired, which the directors had no doubt would be very satisfactory.—Mr. LEVY moved that the report be received and adopted, and thought that as Mr. Rosehill was out of the country his services might be dispensed with.—This led to some discussion, when the CHAIRMAN said the name of Mr. Rosehill had not been submitted for re-election from the circumstance of his being abroad, but he cordially agreed to submit his name for that purpose.—The report and dividend were then agreed to unanimously, and Messrs. Prentice and Maitland were re-elected severally and unanimously, and on the name of Mr. Rosehill being proposed, it was moved by Mr. LEVY, and seconded by Mr. BELL, "That the vacancy be not filled up," which motion was passed unanimously.—A further extent of time, till August, 1844, was afforded to Mr. John Williams to pay up his shares, at interest of 5 per cent., for which Mr. WILLIAMS returned thanks.

Some conversation then ensued between Mr. Bagshaw, Mr. Masterman, Mr. Paterson (directors), and Mr. Levy, Mr. Bell, Mr. Girder, Mr. Stobart, and others, on the late proposition of the Eastern Counties to lease this railway, when the correspondence was read to the meeting by the SECRETARY, from which it appeared that the directors had declined any treaty in the present unfinished state of the concern, when its resources could not be developed.—On the motion of Mr. LEVY, seconded by Mr. STOBART, a vote of thanks was passed to the directors, and much applauded.—The CHAIRMAN returned thanks, and joined in the opinion of the other directors, that they were now getting into a fair way to render the undertaking profitable to the shareholders.—The meeting then adjourned.

EASTERN UNION RAILWAY.

A most influential meeting was held in the Council Chamber, Ipswich, on Tuesday last, to take into consideration the propriety of promoting the extension of the Eastern Counties Railway from Colchester to Norwich, by way of Ipswich, with branches to Harwich Harbour and Bury St. Edmunds.—The MAYOR (G. Jonselyn, Esq.) was in the chair, and among the parties present were W. Long, Esq. (the high sheriff), Messrs. D. Alexander, Hon. William Heneiker, J. C. Cobbold, J. Head, J. Ransome, A. Cobbold, R. D. Alexander, F. Alexander, C. May, P. B. Long, J. Perry, W. F. Schreiber, J. Footman, Rev. H. Lumsden, R. Ransome, J. May, W. Gordon, Rev. W. Mills, Holmes, the town-clerk of Bury, Gowing, J. Abbott, C. Steward, Gosnall, W. H. Alexander, G. Page, J. B. Scott, Rev. H. Owen, J. Duncan (solicitor to the Eastern Counties Railway), S. Braithwaite, Peter Bruff (assistant engineer), &c.—The CHAIRMAN briefly addressed the meeting, and explained that Mr. Clark, the chief engineer, was not present, being compelled to leave this country for Hungary, where he was constructing a bridge across the Danube; Mr. Bruff, however, was present, and would be happy to afford every information.—The HIGH SHERIFF said that he felt some diffidence in addressing the meeting, but, occupying the situation he did, he considered he should not be performing his duty, without giving all his support to a proceeding which he believed was calculated to confer a great benefit upon the county; and, after some general remarks on the absolute necessity of securing the formation of this line, to avail themselves of the great improvements the natural advantages possessed by Ipswich and the other places which would be affected, were capable of rendering, by advancing with the times, moved the first resolution (for which and the others see our advertising columns.)—Mr. PETER BRUFF, C.E., entered very fully into the necessary particulars and description of the selected line, but as we published in last week's Journal the report prepared by the engineers for the provisional committee, it is unnecessary for us here to do more than observe, that his explanations gave very general satisfaction, and the meeting, after unanimously adopting the resolutions, entered into a subscription to defray the necessary expenses—the high sheriff presenting 50l.

[A notice of the proceedings at several other meetings, held during the past week, will be found in another column.]

THE COPPER-WORKS AT SWANSEA.

[From a correspondent of the Times.]

Conceiving that a brief statistical account of these extensive and important works—smelting, as they do, eight-tenths of the copper of the kingdom—would be interesting to your readers, I have endeavoured to procure as accurate an account of them as I could. I find that the copper-works have now been established in the neighbourhood of Swansea for upwards of a century, and have tended most materially to increase the trade of the town and port, as, in addition to the large quantity of copper ore brought coastwise from Cornwall, &c., a very large Cuba and South American trade has sprung up. These works are nine in number, and are as follow:—the White Rock, the Middle Bank, and the Upper Bank, works, which are situate upon the east side of the river; with the Hafod, the Morfa, the Landore, the Rose, the Birmingham, and the Miners' Smelting Company, on the west side of the river. In these nine works upwards of 4000 people are employed, who receive in weekly wages about 3000l., which, to the credit of the masters, is paid wholly in money, not one of the works being at all contaminated by the abominable truck system.

There has been imported into Swansea during the past year, from the 8th of August, 1842, to the 8th of August, 1843, 64,098 tons of foreign ore, in addition to the ores from Cornwall, Ireland, Liverpool, &c., the quantity of which cannot be exactly ascertained, but is said to be quite equal to that imported from abroad—thus making a total of 129,000 tons. The importance of this importation may be in some degree judged of by the fact, that the Customs duty, payable upon the foreign ore imported this year, under the new tariff, will, it is expected, amount to about 50,000l.—supposing the importation to be equal in quantity to that of last year. These ores vary in quality and richness, and, being smelted, produce about 14,000 tons of pure copper, which is the quantity manufactured annually upon the Swansea river. In the process of the manufacture, employment is not only given to the 4000 workpeople I have described as actually engaged in the works, but to many hundreds of colliers, the quantity of coals required for smelting each ton of metal from the crude ore to the state of pure copper varying from 17 tons to 22½ tons; and, to make a ton of spelter or zinc, no less than from 24 tons to 27 tons of coal are required—so that the copper-works alone, it is calculated, consume daily between 1000 and 2000 tons of coal. In addition to which, I find that in 1842 there were shipped at this port 225,938 tons of coal, and 245,222 tons of stone-coal and culm—making a total of 471,241 tons of coal and culm; so that some idea may be formed of the vastitude of the trade which is now disarranged by unhappy differences between masters and men.

CHEMICAL PHENOMENA.

At a recent sitting of the Academy of Sciences, Paris, M. E. Millon read a memoir containing the results of experiments which he and M. Reiset had carried out, in regard to chemical phenomena due to contact, or what is termed catalytic force. They have numerically extended the phenomena of oxidation by catalysis, and have obtained the combustion of organic substances at temperatures but slightly elevated. Tartaric acid, under the influence of spongy platinum, yielded water and carbonic acid at + 140°; cane-sugar began to give off carbonic acid and water from + 140° to + 150°; this point of oxidation is the same for the sugar of raisins, of milk, and of diabetes; butter gives carbonic acid from + 90° to + 100°, and olive oil between + 80° and + 90°; stearic acid and wax burn at about + 100°; their combustion is complete below + 200°.

Platinum determines with equal activity operations entirely opposite. It disunites as well as reunites, it destroys molecular groupings, it acts as heat. If two tubes, containing the same quantity of nitrate of silver, but mixed with spongy platinum in the one, and pure in the other, be plunged into a sand-bath, and the temperature gradually raised, the salt of silver will be entirely destroyed in that containing the platinum before decomposition is commenced in the other tube; and MM. Reiset and Millon have realized for platinum the same effect on chlorate of potash which oxide of copper or of manganese exercises. Pumice-stone also acts as platinum in regard to the chlorate; and in all cases with the platinum or pumice-stone the destruction of the chlorate is complete before the chlorate alone has disengaged a single bubble of gas. Nitrate of ammonia presents, under the same circumstances, analogous phenomena, but more striking. From the platinum tube may be obtained a regular disengagement of gas at + 160°; but on examination this gas has none of the properties of the protoxide of azote. The supernatural salt, instead of undergoing the ordinary transformation, as if acted upon by heat, is converted into nitric acid, azote, and water; and the temperature at which nitrate of ammonia is decomposed, is lowered by the presence of platinum about 70°. Pumice-stone is not so active on nitrate of ammonia as platinum; it gives, at + 230° only, a mixture of azote and its protoxide, the latter predominating. Charcoal produces the separations of the elements of the same substances at + 170°; but the development of the gas is accompanied, although at this low temperature, with a violent explosion. It acts, doubtless, in the same manner as platinum and pumice-stone, but with more energy in this case. Other examples were given, to show that spongy platinum, pumice-stone, and charcoal, constitute three agents of contact, but very different; they do not possess an absolute activity, but act in different degrees on the same substances, and perhaps, in regard to several bodies, are active or active, and inert on others; they all, however, exercise an activity of contact which renders them important physical agents. The effect of the two former on alcohol, ether, and acetic acid, is very marked. Oxalic acid, again, resists their influence; but the contact of powdered charcoal determines great changes into the mode of decomposition.—In conclusion, MM. Reiset and Millon remark, that combustion at low temperatures, obtained under the operation of substances of contact, being means to ordinary phenomena of slower the oxidation which fuel in our organs doubtless undergoes.

KNIPE'S GEOLOGICAL MAP.

It has been our province, on several occasions, to notice the publication of maps, illustrative of the geological features which this country presents, among which those of Greenough, Murchison, and Griffiths, stand pre-eminent; and, on the present occasion, in noticing Mr. Knipe's beautiful arrangement—availing himself, as he has done, of the prominent parts, as well as the more interesting details, of those who have preceded him—we are bound to admit that, without claiming the merit of originality, as a compilation it eclipses all others, more especially in its execution. In noticing those points to which we would more immediately direct attention, we may observe on the uniformity of its topographical arrangements, the several cities, county towns, boroughs, market towns, and parishes, being distinguished, as well as all the new ports, harbours, and lighthouses—the various soundings and cottidal wave being also depicted. The chart of the Thames also affords evidence of much attention having been directed to this portion of the map. The mountainous region is clearly shown, with the elevations of the principal ranges, and the inland communications embrace every new feature which may be considered desirable or necessary in a national map of the present day, possessing, as it does, the facilities of the acquisition of correct data. Having said thus much for the execution of the map, with reference to its general features in a geographical point of view, and as one of general utility, we shall at once proceed to notice its claims as a correct delineator of the geology of the British Isles and a part of France, observing, en passant, that among the authorities quoted, to which immediate reference is made in the map, are the names of Buckland, Greenough, Sedgwick, Lyell, Murchison, Conybeare, Phillips, Brochant, Dufrenoy, Beaumont, &c., &c. In, however, thus expressing the high opinion we entertain of the map, as a work of elaborate care and execution, we must not be understood to admit that in all its points—we mean, more especially, where it varies from the authorities to which we have referred, with a view to comparison—that the author is correct in his definition of the peculiar strata or deposit. He has, however, doubtless, good grounds for such slight deviations as occur, founded either upon inquiry or personal investigation. The uniformity of colouring is much to be admired, as the eye can now travel over a vast expanse, without the necessity of referring to the explanation, which, not being universal in the several maps of which this may be said to be composed, are attended with difficulty and annoyance.

FARMERS' AND GENERAL FIRE AND LIFE ASSURANCE LOAN AND ANNUITY INSTITUTION.

This office, established only in March, 1840, presents, in the amount of business now effected, perhaps a more gratifying progress than is to be found in the history of insurance offices. It stands fifth on the list of London offices, and, in respect to the peculiarly country companies, it is second only to the Norwich Union; on farming stock alone, insurances from fire are now effected to the large amount of 3,304,648l., and on general property 4,393,600l.—making a total, after only three years' establishment, of 7,698,248l. To account for this more than usually expressed confidence in a young assurance company on the part of the public, the advantages and facilities offered in their prospectus must be taken into consideration, together with the very peculiar and beneficial enactment in the Act of Parliament—viz., that the directors are compelled to have enrolled every shareholder in the undertaking, and which register is always open to the insured, who can, at the present moment, consult a list of nearly 2000 proprietors, moving in the first circles, and thus satisfy themselves of the respectability of the concern, and the perfect security held for any money they may invest. With respect to the terms of life assurance, they are on the lowest scale possible consistent with the safe conduct of the concern; thus a payment of 35s. 8d. per annum, or about 8d. per week, by a person aged twenty-one years, may secure 100l. payable at his death, or for larger sums and other ages in proportion, and should unfortunate circumstances ever render continued payment inconvenient or impossible, policies will, at any time, be purchased for their equitable value; or another insurance for a less sum, without any further premium, may be obtained.

With respect to deferred annuities, the terms are equally liberal; and here, again, should a reverse of circumstances overtake the annuitants, and prevent a continuation of his payments, the whole amount he has paid will be returned him, or, in the event of his death before the stipulated age, to his representatives, deducting only a small sum for management. The distress which existed generally even at the period of the formation of the company, and which has so materially increased since that period, no doubt must have had a retarding tendency on the business of this, as well as other, offices, notwithstanding which a steady increase has taken place—the sum insured for the year ending the 20th of March, 1842, being 156,114l., and in that ending some day, 1843, 202,054l., and such an accumulation of business, in the short space of three years, surpasses anything on record. It is the intention to give a bonus of one-half the profits on life policies, to all shareholders, being holders of policies effected since January 1st, 1843, on a valuation to be made every five years. The business of this company is evidently on the increase, nearly 750 agents have been appointed in the country towns, and others continue to be adding, and with a continuance of that attention and energy, which has from the first marked its rapid progress, there can be no doubt but that the Farmers' Life Assurance Company will keep its high place among similar institutions.

TO THE PROPRIETORS OF THE BRITANNIA LIFE ASSURANCE COMPANY.

Notice is hereby given, that, at the Quinquennial General Meeting, held for the purpose of receiving the report of the state of the company's affairs, with the valuation of the outstanding liabilities, and the estimate of the surplus fund or profit, it was resolved unanimously:—

1. That, in consequence of the extraordinary success of the institution—upwards of nine policies having been issued during the last five years, and a large surplus fund having been accumulated after setting apart an ample sufficient sum, to provide for the outstanding liabilities—the directors be empowered to apportion out of such surplus the sum of 4l. per share among the proprietors.

2. That, as the fundamental provisions of the Deed of Settlement strictly prohibit the disposal or alienation of the profits or other funds of the company, the whole of the profits being reserved to form a continually increasing capital for the security of the assured, the directors be empowered to allow interest, at the rate of 4 per cent. per annum, on the sum above mentioned, in addition to the interest on the capital originally subscribed.

The proprietors are, accordingly, requested to transmit the certificates of their shares to the company's office, in order that the proper endorsement may be made thereon.

PETER MORRISON, Resident Director.

1, Princes-street, Bank, London, July 20.

MINE ACCIDENTS—BROADFIELD COLLIERY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In your valuable Journal of Saturday last, you have given a statement of an accident that happened at this colliery; and that statement, being on very far from the truth, induces me to notice it, and to request you to correct it in your next Number.—The accident is represented as taking place at "Berry Hill Colliery, Pontypool," &c. No such place exists. It was at Broadfield Colliery, near Pontnewynydd.—It is also stated, that it was caused by the reversing of the engine. If you will refer to the Staffordshire Advertiser of the 15th instant, you will find that it was caused by the breaking of one of the wheels of the engine, and by the impudence of the men contrary to the regulations of the colliery; in descending one shaft while coal was being drawn up another shaft connected with the engine.

I take this opportunity of stating, also, that there is not a proprietor of any colliery or mine in the United Kingdom who is more anxious to have, and more liberal in providing, proper and efficient machinery and implements than Alderman Copeland (the principal proprietor of this colliery); but if men, and among those the overmen, will—in despite of the rules and regulations, which they themselves are bound to enforce—risk their lives so indiscreetly, I cannot see what can be done to prevent them.

A. L. BANTON.

Broadfield Colliery, August 16.

[The statement alluded to was forwarded to us, and we are at a loss to account for the inaccuracies complained of. We, however, most readily insert the letter of our correspondent, being anxious that the most correct information on all subjects shall appear in our columns.]

Millfield Gate Colliery, Cornwall.—Joseph Lenne was killed by being precipitated down the shaft of a pit at this colliery; at the inquest, held on the body, a verdict of manslaughter was returned against John Pritchard, the engine tenter, and Joseph Matthews, a butty collier, who have been committed for trial at the assizes, as being in some way implicated in causing the death of the deceased.

United Hills Mine.—As a miner, named Thomas Cushing, was at work in a shaft in this mine, St. Agnes, on Saturday last, a stone fell from the kibble, struck him on the head, and fractured his skull in a most dreadful manner; but little hope is entertained of his recovery.

Fire-damp.—On Tuesday last, a young man, a collier, was severely burnt by an explosion caused by the ignition of a quantity of foul air in a coal-pit near the "Black Boy," to the westward of this town; he was instantly taken home, and every attention paid to him, but his recovery, we regret to say, is almost hopeless.—*Swansea Journal.*

THE PENDLETON COLLIERY.—We are happy to state, on authority, that the damage occasioned to Mr. Fitzgerald's colliery by the irruption of the water (noticed in our last week's Journal), and the loss likely to be sustained by him in consequence, are by no means to the extent which our first information led us to report. The exact particulars of an event like this can never be correctly ascertained in the first instance, and we are happy to find that the quantity of water that broke in is nothing like 3000 gallons a minute, and that the colliery, so far from being destroyed, is, in fact, no further injured than by the temporary suspension of its trade until the water be pumped out, and which the powerful engines on the spot will easily accomplish, after which the raising of the coal will be resumed; the want of it, however, at this time is severely felt in the Manchester market.

CONSUMPTION OF STEEL IN THE MANUFACTURE OF STEEL PENS.—The steel pens employed in this country for making pens consume to 120 tons annually, which is equivalent to about three hundred millions of pens!

RAILWAY MEETINGS.

The meetings of the proprietors of railway property have been numerous this week—those of the London and Birmingham, the London and Brighton, and the Northern and Eastern, will be found under the head "Proceedings of Public Companies"—and the reports of the North Midland, the Midland Counties, and the Birmingham and Derby, are important, as alluding to the amalgamation of the three lines, and then dividing such union into two classes, the North Midland and Midland Counties proprietors to have a dividend of 25s. per 100*l.* share more than the Birmingham and Derby proprietors. This proposal had met with much opposition on the part of some of the shareholders of each of the companies; but the most general opinion appears to be, that a great saving in expense would be the result, and some extracts were read from the circular of Messrs. Bell and Co., share-brokers, of Leeds, stating their opinion that the proposed junction would raise the shares of each company from 20 to 30 per cent.; while considerable objection was made to the conduct of those directors who had evidently taken advantage of the secrets they were in possession of, in a pecuniary point of view, on the Stock Exchange. The proceedings at these several meetings were rather boisterous, but, in each case, the reports were adopted. That benefit will result to all the companies from the amalgamation, appears to be generally believed, and that the expenses will be greatly reduced there can be no doubt.—At the meeting of the Grand Junction Company, held at Liverpool, the report read stated that the total receipts for the half-year ended June 30 were 185,093*l.*, being 22,543*l.* less than in the corresponding period of 1842; the total profit was 110,781*l.*, from which a dividend of 5 per cent. was declared.—The report presented at the half-yearly meeting of the York and North Midland Company, held at York, stated that the receipts had fallen off in comparison with the like period of 1842, by 2200*l.*, but still the dividend of 10 per cent. was retained. A considerable increase of traffic was expected from the entire completion of the Newcastle and Darlington line, and resolutions were passed, declaring the expediency of extending the railway to the fashionable watering place of Scarborough, thus uniting it with Bridlington, Whitby, Pickering, &c.—The half-yearly report presented at the meeting of the Newcastle and Darlington proprietors, held at York, stated that there was no doubt but that the line would be complete for opening in July, 1844; the maximum cost, the directors now stated, would not exceed 490,000*l.*, which would be 20 per cent. within the engineer's estimate, and without having recourse to the power given them in the Act of Parliament, of borrowing money—a circumstance almost unprecedented. Resolutions were passed, authorising the directors to enter into negotiations with the Durham Junction Company, if it was considered that it would be advantageous to purchase that line; 6 per cent. is guaranteed by the midland railways to this line for ten years; and with regard to the railway chain to Scotland, Government had given preference to that route, which would benefit this property.—At the Chester and Birkenhead meeting it was stated that the total receipts from the 31st December to 31st June were 13,000*l.*, and the expenditure 10,171*l.*—leaving a surplus on traffic account of 2832*l.*, from which the directors recommend a dividend of 7s. 5d. on the original (50*l.*) shares, and 3s. 7½d. on the half shares, leaving a balance in the hands of the company of 118*l.*—The report of the North Union Railway stated that the receipts in the passenger department have fallen below those of the corresponding period of last year by nearly 2000*l.*; on the other hand, by a reduction of the interest on the bond debt from 5 to 4 per cent., a saving of nearly 1400*l.* per annum has been effected. The receipts for the half-year were 33,337*l.* 13s. 9d., the expenditure 18,646*l.* 17s. 11d.—leaving the sum of 14,282*l.* 15s. for a dividend of 2*l.* 5s. per share on 6330 shares, and a balance of 42*l.* 3s. 9d. From a statement of the capital account it appears that the total receipts have been 453,118*l.* 19s. 4d., the total expenditure 433,011*l.* 17s. 10d.—leaving a balance of 19807*l.* 1s. 6d. in hand.—From the report of the Manchester and Bolton Railway Company, it appears that, during the half-year ending the 30th June, the receipts for coaching and traffic on the railway were 17,811*l.* 9s. 1d., the expenses 10036*l.* 7s. 0d.; the canal receipts 5776*l.* 6s. 8½d., expenses 2433*l.* 4s. 8½d.—leaving a total surplus of 11,225*l.* 3s. 10½d., and after payment of interest, income tax, &c., a disposable net surplus of 10,236*l.* 9s. 6d. Out of this sum a dividend of 1*l.* 7s. 6d. per share was declared—leaving, together with the dividends on 120 shares held by the company, a balance of 1936*l.* 5s. 2d. in hand.

PUBLIC COMPANIES.

MEETINGS.

Monmouth and Glamorgan Bank	King's Head Inn, Newport	Aug.	14	1.
London and Greenwich Railway	London Tavern		15	12-1.
Durham County Coal Company	Sun Inn, Darlington		15	12.
Combmartin Mining Company	Mine, Combmartin		16	12.
Great Western Railway Company	Station, Bristol		17	12-1.
Pacific Steam Navigation Company	Office, 14 A, Austinfriars		18	12.
Pontop and South Shields Railway	Offices, Guildhall-buildings		21	12.
Taff Vale Railway Company	Cardiff		22	11.
Edinburgh and Glasgow Railway	Offices, Glasgow		22	1.
Maryport and Carlisle Railway Co.	Aspatria		23	11.
Bristol and Exeter Railway	White Lion Hotel, Bristol		23	1.
Consolidated Tretoil Mining Co.	Office, 6, Mildred's-court		24	1.
Eastern Counties Railway Co.	Station, Shoreditch		24	1.
Birmingham and Derby Railway	Lawley-street, Birmingham		25	11.
London and South Western Railw.	Station, Nine Elms		30	1.
Hayle Railway Company	Office, 4, New Broad-street		31	1.
Southampton Dock Company	Offices, 19, Bishopsgate-within		31	1.
Manchester and Leeds Railway	Oldham-road Station	Sept.	6	12.

CALLS.

West London Railway Company	3*l.* per sh.	As formerly	Aug.	15.
Durham County Coal Company	2*l.* per sh.	Roberts, Curtis, and Co.		17.

DIVIDENDS.

Tincroft Mining Company	10s. per sh.	41, Finsbury-square	August	23.
London and Westminster Bank	3 per cent.	Bank, Lothbury	Sept.	11.
London & Birmingham Railway	10 per cent.	As formerly		

NOTICES TO CORRESPONDENTS.

The MINING JOURNAL *is regularly published about Two o'clock on Saturday afternoon, at the office, No. 26, FLEET-STREET, where it can always be obtained and there is no cause for irregularity in its supply, in town, other than neglect on the part of the agent through whom it is ordered; but, as respects its transmission to country subscribers, the blame is shared with the Post-office authorities.*

HOT-BLAST.—"B." (Abergavenny).—Since our last publication we have received a report of the trial "Neilson *v.* Baird," from the short-hand notes of Mr. D. Buchanan, jun., and occupying 340 closely printed pages. It can be procured of Messrs. T. Allan and Co., High-street, Edinburgh, or through any bookseller. In some early Numbers we shall extract pretty freely from the valuable evidence adduced on this important trial.—We are obliged to "A Subscriber" for his promised information, which, however, he will perceive we have received from another source—the other subject shall receive early attention.

"A Subscriber" (Manchester).—Mr. F. Bruff's *Treatise on Engineering Field-Work*, is divided into two parts—the Theory and Practice of Surveying, and of Levelling—and can be procured of the publishers, Messrs. Simpkin and Marshall, London; or through any bookseller in Manchester, at 6s. 6d. each volume.

ACCIDENTS IN COLLIERIES.—We are again compelled to defer the insertion of our remarks on this subject until next week.

More extensive premises than those lately occupied being found necessary, the establishment of the *Mining Journal* is REMOVED TO 26, FLEET-STREET (opposite St. Dunstan's Church).

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, AUGUST 12, 1843.

*** Parties desirous of ordering the *Mining Journal*, can do so, either direct to the office, or through any newsvender or bookseller in town or country. Notices of irregularity in its delivery are requested to be forwarded to the office, where every endeavour will be made to rectify the cause of complaint.

In the course of our duties as advocates of the great mining interest of this country, we have ever kept a watchful eye over the progress of the comparatively new art of iron ship-building. Our readers will have observed that we have frequently recommended it to the attention of the shipowners and capitalists of this country. We have not done so on light grounds—as being led away by the novelty of the subject, or as considering it merely as a question that may benefit a particular class of men. Our remarks have been based on the consideration that it is a subject of the greatest national importance; and we do not hesitate again to recur to it, in the hopes that it may assist in affording relief to the difficulties under which the iron trade now struggles. The period has certainly arrived when, if some favourable change does not take place in our mining interest, and in the iron trade in particular, a great and permanent destruction of property must ensue. We view this, not only with a feeling of commisseration for the sufferings of a large class of men, now engaged in mining, but with some alarm for the peace of the country.

Under ordinary circumstances, it may be well to allow great radical changes, in manufactures, as well as in the constitutions and institutions of countries, to progress gradually—that the necessity and advantages of such changes shall have become so apparent as to be readily acquiesced in by all, and therefore not endangered by cabals raised by an interested opposition. There may be, and often are, occasions, when great changes may affect, not only the parties directly concerned, but, indirectly, the country at large; while, at the same time, it may be quite possible that the present interest—and, therefore, the prejudices—of those who have the power to control such changes may be hostile to the opinions and interests of the mass. This, reasoning, probably, best explains the cause of the slow progress of iron ship-building.

A great change is here proposed, which would require in its progress hundreds of thousands of tons of a staple produce of our own soil, as a substitute for a material which, to a great extent, is imported from other countries, or occupies portions of our own land which might be profitably employed in the growth of corn. As this new manufacture advances, thousands of additional hands will be called to a steady, permanent, and profitable employment; it would also effect a revolution, much to be desired at the present moment, by placing our own shipping interest beyond all competition with that which is now but too successfully carried on, to our great disadvantage, by other nations. This change will carry with it the confidence of the public, judging from the preference now shown by passengers for iron steamers; and it will tend, ultimately, immensely to the advantage of those whose fortunes depend on the profitable working of their vessels.

Taking it, then, at present, for granted, that this new art will employ our own produce and our own population, that it will enable us successfully to compete with other countries, that it will have the confidence of the public, and be a profitable employment for the capitalist whose interest is affected by it—we are led to ask, why it is that its superiority is not universally admitted, and allowed to supersede the old system? The answer is easy—the present interest, and, therefore, the prejudices, of a small, but very powerful, class, stand in the way. To find this class, we have but to resort to a well known spot, in the City, and we shall soon have a clue as to all the obstacles that obstruct this change. It is at LLOYD'S where we shall best be made sensible of these obstacles. "If iron is so superior to wood for building ships, and has so many advantages to recommend it, what will become of our fleets of merchantmen, built on the old system, already so much depressed in value?" It is, indeed, but too clear what will be the result on the value of this property; and it is painful to reflect that a much greater depreciation must still be incurred. It is, then, to the present class of shipowners we must trace the origin of the continued opposition to iron ships. We may, however, observe, that shipowners have not

so much reason for alarm as might, at first, be supposed. Their vessels are now either rotting in the docks, or sailing at a loss, arising, in some measure, from the competition of foreigners; but the employment of iron will place them beyond all chance of rivalry, and restore, on a surer basis, the trade that is slipping from them. We cannot hope, however, from our knowledge of the deep-rooted prejudices of this class, that they will listen to these arguments; we must, therefore, either wait with patience, and allow time to effect the change, or consider by what means it can be hastened forward.

The position, therefore, is this: the interest of an opulent and powerful, but small, class of men (we leave shipbuilders out of the question, as we consider that very few ships will again be built in *this* country) is, or is supposed to be, at variance with an improvement that would give employment to great numbers—both at the sea ports, and in the mining districts. The smaller class have it in their power so much to retard this improvement, as to cause men to despair of seeing it make any material progress for many years. It is clear that this change would only occasion a temporary and partial loss, out of which they would probably rise more firmly established than before; while, on the other hand, the larger class, who are in want of immediate relief, are deprived of the benefit this change would produce. In such a case, it may not be unwise, but, rather, desirable, to use every means to urge forward the change. It is a subject in which the Government may give their *direct* aid and sanction, without clashing with private interests.

A deputation of the leading ironmasters has lately waited on the Premier, and was received with the attention due to the importance of the subject to be represented; and, although but small effect seemed to be produced on the mind of the cautious minister, yet, we have no doubt, the arguments used by the deputation will have weight in the future measures of Government; but, while we are debating about effects to be produced from speculative, and, in some cases, very questionable, alterations in our foreign policy, let us not lose sight of our own resources. The Government have always built their own ships—and let them do so still, *if* they think it desirable; but let them well consider whether iron may not safely be preferred to wood—and their adoption of it for ships of war would speedily decide the question in the merchant service. It is true, the Admiralty have given orders for two iron steamers; but in this their example is not required; none but themselves have, for a long time, disputed the point as regards steam-vessels. In this, as in too many other cases, they are reluctantly following in the steps of private enterprise.

We know that some of the iron sailing vessels that have been built have been singularly unfortunate; but the peculiar accidents which have occurred to them have, when properly explained, rather afforded proof of their superiority, than any ground of complaint against them. The objection which seemed the most difficult to remove was, that of fouling in tropical climates; but recent satisfactory proofs have been given, at Liverpool, by vessels returning from long voyages, that, by a simple and very cheap coating, the bottoms of iron vessels may be kept perfectly clear from shells and weeds.*

We intended, when we commenced this article, to have explained the principal points in which iron is superior to wood, as a material for ship-building; but we find our space will not admit of it. We would, however, strongly recommend those who are interested in the subject to peruse a modest little work, written by Mr. GRANTHAM, in support of iron vessels, where all the principal objections are answered, and the advantages pointed out. It is there shown, that, although iron vessels are looked upon as a novelty, they have, in fact, been long in use, and have for many years been making a slow, though, we trust, a sure, progress. We shall, however, return to this subject in an early Number.

The rapid strides making in the advancement of science, and the increasing growth of knowledge are daily developing themselves, and truly delightful is it to find that the attention of the heads of the church, the aristocracy, and the intellectual classes of all grades is directed to the subject, with the view to its further expansion—while an equal pleasure is derived in recording the praiseworthy efforts which are making, as well as in registering the results attendant on their labours. It was but lately that we had occasion to notice the formation of a society under influential patronage, having for its object the association of literary men, and enabling them to gather from the mine of knowledge and laborious research those treasures which have been collated by others, who, in common with themselves, are labourers in the vineyard.

If it be gratifying to record this advance in the literary or scientific world, how much more so is it to note the formation of a society which has for its object the dissemination and extension of knowledge among the humbler classes in the manufacturing and mining districts. Truly worthy is the object of those who have so nobly come forward as patrons and supporters of an institution which shall provide the means of extending and improving elementary education in those districts where toil and labour, with but a trifling pittance in return, precludes the miner, mechanic, and those employed in manufactories, from giving to their children the blessings, as well as advantages, of education—raising them, in many instances, from a state of ignorance and demoralisation, to a knowledge of the truth, and the duties they owe to the Supreme Being, as well as to their fellow-creatures. The measures proposed by the society is, by the collection of funds, to expend the same in grants towards building school-rooms, and, in certain cases, increasing or guaranteeing the salaries of teachers, and thus to meet the wants of the poor in those districts where they have not the means of procuring a religious and solid education for the younger branches of their families.

The finance committee consists of the following members, from whom, we believe, none could be selected whose names would be received with greater confidence or cordiality by those interested in the promulgation of knowledge, and the advancement of religion—in which are embraced the true interests of the community. The committee consists of the Lords Bishops of London, Durham, Chester, Bangor, Ripon, and Hereford; Lord ASHLEY, M.P., Viscount SANDON, M.P., Lord REDESDALE, Rev. J. SINCLAIR (treasurer), WILLIAM COTTON, Esq., WILLIAM DAVIS, Esq., G. F. MATHISON, Esq., and RICHARD TWINING, Esq., who have undertaken the collection and administration of the fund.

We have only, in conclusion, with reference to this particular society, to direct the attention, not only of the miner and manufacturer, but those who are indebted to them for the wealth they possess, or the comforts they enjoy, to an advertisement which will be found in another column.

Among other scientific bodies, we must enumerate the Royal Scottish Society of Arts, the advertisement of which, announcing honorary medals and pecuniary prizes, appeared in our columns of the 24th of June, communications and models being received until the 1st of November. The inventions, discoveries, and improvements, as well as processes observed in the mechanical and chemical arts in general, and also the means by which the natural productions of the country may be made more available, particularly such as apply to the useful arts, whether at home or abroad, the methods of consuming fuel, prevention of smoke, ventilating of buildings, &c., are more immediately the subjects to which attention is directed. The value and importance to be attached to this institution are duly appreciated, although it may not be so generally known as it deserves; we shall, therefore, take an early opportunity of recurring to its objects, and the advantages which it presents.

We cannot close this brief notice on so interesting a subject, without directing attention to the Royal Polytechnic Society of Cornwall, the annual meeting of which is close at hand; we have so oft availed ourselves of the interesting papers which have been read at the meetings, that we deem it unnecessary further to notice the institution, until we are called upon to report its proceedings.—Again, we find that the council of the Liverpool Polytechnic Society have announced prizes, or premiums, for essays, models, &c., as announced in our columns, but our limits preclude us from further entering on the subject on the present occasion; it is one, however, highly deserving of attention, and to which we invite that of our readers.

We last week briefly noticed the receipt of a communication from Mr. FRANCIS GRAHAM MOON, having reference to his connection with the West Cork Mining Company, but the consideration of which we were compelled to postpone from the late hour at which it reached us. We have since had opportunity of perusing the letter to which we then made reference—but, feeling that we should, perhaps, overstep the bounds of propriety, in dealing with a document which has been submitted to a Select Committee of the House of Commons, and on which a report has not yet been made, as well as possibly betraying a confidence reposed—we feel constrained from entering into that full consideration of the case which its importance demands, but purpose noticing it at length after having given to it a full and impartial consideration. The reasons we have already given preclude us from offering any further observations at the present moment. We may, however, admit, that Mr. MOON availed himself of the means of disconnection from those with whom he had become associated—by the disposal of his shares, and retirement from the board—on the fraudulent conduct of other parties being made known.

Deeply impressed with the importance of the proceedings of the Select Committee of the House of Commons appointed to inquire into the state of the laws respecting Joint-Stock Companies, with a view to the greater security of the public, it is with much regret we announce that the committee have made their report to the House without having arrived at any conclusions. To use the words of the report, we find that, having "considered the matters to them referred, and adverting to the advanced period of the session, and the extended range and complicated nature of the subject referred to them, as well as its importance, the Committee are of opinion that it is not expedient, at the present time, to investigate it further; but they recommend to the House to revive the inquiry at the commencement of the ensuing session of Parliament."

We fully concur with the committee as to the "complicated nature" of the inquiry, and only regret that their labours should have been so incomplete, when the importance of the subject is considered, or that the time devoted to the inquiry should have been of so limited a nature. It appears that the committee was not appointed until the 30th of May; and on the 2nd of August (just about two months after) it was "Ordered—That the Committee have power to report their opinion to the House"—which opinion is embodied in the extract preceding. We regret this postponement of the question; for we are fully sensible of the value of the information already acquired, and which may possibly be lost to the community, as the committee may never be "revived."

At a late period of the former Administration, such measure was entered upon, *con amore;* the change which came "o'er the scene" caused an interregnum to take place, and it appears that it was only two months since the Government or Legislature came to the conclusion that it was desirable a select committee should be appointed—and, before the close of the session, such committee came to the conclusion, that, from the "importance" of the several subjects which had come under their consideration, it was highly desirable the matter should be *adjourned for six months.* With all due deference to the chairman and members of the committee, we might say—why did they not adopt parliamentary language and usage, for, by the commitment or second reading of a bill being fixed for six months, such is, if we mistake not, an implication that the question is no longer entertained—or, to use a common expression, "thrown overboard!"

PRESENT STATE OF THE IRON TRADE.

With the view of placing before our readers the most accurate information respecting the actual state of the iron trade, we are endeavouring to procure returns from each district, and shall present them, as received, until the whole shall afford a complete list of furnaces, in and out of blast, with amount of weekly make, for the six months ending June 30, 1843:—

SOUTH WALES—*continued.*

Name of work.	Firm.	Furnaces in blast.	Furnaces out of blast.	Weekly make.
Ystalyferwyn Anthracite Furn.	G. Crane and Co.	5	—	160

[We are informed that our statement of the make of iron at "Cwm Celyn" was wrong. The actual make from three furnaces, for twenty six weeks, ending June 24, 1843, averages [10 tons 15 cwt. each furnace per week—Hot-blast in use, raw coal was used at these works.]

Leamington	Bolmer and Co.	1	—	60
Rowdedale	Rowdedale Iron Co.	1	2	50
Rywell	Thompson and Co.	1	—	50
Birtley	— Perkins	1	—	35
Hareshaw	— Carrgeon	2	—	100
Consside	Derwent Iron Company	2	—	110
Totals		8	2	405

DERBYSHIRE.

Butterley Iron-Works	Butterley Company	2	1	140
Codnor Park Iron-Works	Butterley Company	1	2	50
Alfreton	James Oakes and Co.	2	—	70
Morley Park	Mold and Co.	1	1	95
Dunkinsfield	Smith and Rowe	1	1	60
Renishaw	Appleby and Co.	1	1	60
Hercley	Barrow and Co.	1	2	60
Totals		9	9	435
[In 1842	13 were in blast and 5 out.]			

YORKSHIRE.

[From another Correspondent.]

Shelf, Lowmoor, Bowling, Birstley, Wortley, Milton, Elsicar, Thorncliffe, Chapeltown, The Holmes, Masborough, Park gate, Sheffield park	Hird, Dawson, and Co.	5	5	320
	Sturgess and Co.	2	2	90
	Leah, Clayton, and Co.	3	1	135
	Platt, Cooper, and Co.	—	1	—
	Graham and Co.	1	1	60
	Lord Fitzwilliam	4	3	410
	Chambers, Bowling, & Co.	1	2	40
	Rawlins, Marsden, & Co.	—	2	—
	Clarke	—	2	—
	Schoefield and Co.	—	1	—
	Booth and Co.	—	2	—
Totals		15	22	1055
[In 1842	22 were in blast and 7 out.]			

We hope, in another Number, to complete our returns, when we shall have occasion to offer some observations on the iron trade—and, in the mean time, we court information.

NEW MOTIVE POWER.—We are informed that a working model of an engine, without furnace or boiler, exhibited at the Masonic Hall, New York, has been highly approved by Dr. Lardner, and created the utmost admiration among the scientific world; but, as the model is to be forthwith produced in this country, we would prefer a personal inspection, previous to publishing the statements with which we have been favoured.

TAFF VALE RAILWAY.—The adjourned special general meeting was held on Tuesday week, at the Castell Arms, Cardiff. The committee of inquiry not being prepared with a report, the meeting was further adjourned to the next half-yearly general meeting.

ORIGINAL CORRESPONDENCE.

MINING IN SPAIN—No. VIII.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Wishing to reconcile the claims of the Asturian coal proprietors to protection, with the wants of the Mediterranean smelters, the Central Mining Junta have put forth three propositions on the subject of fuel, which they intend to press upon the attention of the Government the very earliest opportunity—viz.: 1. That the free introduction of coke into the kingdom be allowed; 2. That foreign coals be received as usual, on the payment of 1 rial vellon per quintal in national, and 2 ditto in foreign, vessels; and 3. That these regulations be held to be in force until the shippers of national coals are in a situation to supply the market with the same article, at prices at least equal to those at which it can be obtained from foreign countries. This measure, they consider, would answer all the ends which the Asturians propose to themselves, and exonerate the Government from a charge of partiality. Coke, of which the consumption is so considerable, is not made by the Asturians; consequently, they cannot take the new regulation as an interference with their interests. As regards the comparative prices of British and Asturian coals, the calculation stands thus:—The prime cost of British per ton (22 quintals) is 7*s.*, or 35 rials, on board; from 14*s.* to 15*s.*, or 72 rials, freight; and 2 rials per quintal duty, or 44 rials per ton—total, 151 rials per ton. Asturian coal, at Guijon, costs 4 rials per quintal, and freight to Carthagena 5 rials—equal to 198 rials per ton; thus leaving a difference in favour of foreign coal equivalent to 47 rials, to which may be added the preference as regards quality. The present high cost of Asturian coal is owing to tolls, and the charge of conveyance to the shipping port, amounting to 3 rials per quintal, leaving only 1 rial for digging, raising, and the double profits of collier and merchant.

I have already alluded to the erroneous notions prevailing in this country as regards the existence of coal in the Peninsula, and I have quoted some foreign authorities to prove it. That kind of testimony may not, however, be deemed satisfactory; I shall, therefore, adduce evidence of another description, in reference to Asturias—for, while, on the one hand, we look at the depressed state of the coal trade in the North, and hear the oldest and largest proprietors of collieries assert that they do not now ship more than one-third of the quantity which they formerly did, on the other we see apathy and indifference on the part of those most interested in the question; the export duty continues in force at a moment when, under any other circumstances, the consumption of British coals on the European continent, by competition, would long ago have been materially diminished.

Last year, a company was formed in Asturias to work the collieries of Tudela, when one of their first acts was, to send to England for an experienced person, to view and report upon them. The individual selected was Mr. Forster, coal mining engineer, of Butterknowle, Durham (well known in this department), who went to the spot, carefully examined the locality, and made his report to the company. Among other particulars, he states the following:—

The coal field of Tudela extends from east to west, and runs parallel with the river Nalon for the distance of one mile and a half—the drift, or water level course of the measures, being also nearly in that direction; from north to south, or in the dip and rise course of the measures, its extent is about the same, being bounded on its north side by the Nalon river, and from thence to the south by three hills of considerable elevation. The seams or beds of coal, and, of course, their accompanying strata, are very nearly perpendicular, forming an angle of about 80° with the horizon. As will be hereafter seen, the coal contained in this tract is sufficiently large to yield an abundant supply for many years. The beds or seams of coal already discovered in this tract are twenty-four in number, out of which I have selected fourteen workable seams, varying from two and a half to twelve feet in thickness, from which I estimate that the supply of coal will be derived. It is very probable that, as the works extend, other seams yet undiscovered will be met with. Several of the fourteen veins on which my estimate is founded have been cut for a considerable distance, and their thickness and continuity satisfactorily proved. As to the others, I judged by their basset, or outcrop, and by the information received on the spot from parties who have been engaged in working them.

The total thickness of workable coal in the fourteen seams above alluded to, allowing for variation in thickness, I estimate at fifty four feet; and the quantity of coal which they will yield, assuming that the breadth, or, more strictly speaking, the height, of the seams above the level of the Nalon river will average 100 feet throughout your concessions, I estimate, after allowing for loss in working, at 5,600,000 cubic yards—and the specific gravity of an average specimen being 1·261, the quantity of tons of large and small coal in the above number of cubic yards will be 4,750,000 tons of 2240 lbs. This quantity will supply an annual vend of 107,000 tons for upwards of forty-seven years. It is very probable that these seams of coal extend downwards considerably below the level of the Nalon river, but I confine my present estimate entirely to the coal above the level of the valley, and therefore available and capable of being drained by adits driven out of the valley. The coal is of a bituminous quality, yielding much flame in burning; capable of making good coke for the manufacture of iron, well adapted for gas and household purposes, of sufficient hardness to bear carriage; and is, in my opinion, equal in quality to the coals sent from the north of England to continental markets. This coal field lies about thirty miles south-east from the most eligible port of shipment, St. Esteban, in the valley of the river Nalon, at which port that river enters the sea. As the river is not navigable for any considerable distance, it will be necessary to effect a communication between the coal mines and the port of shipment by means of a railroad or tramway to be laid along the valley, throughout the whole distance of thirty miles. For the construction of this railway, the line of country is peculiarly favourable. From St. Esteban, the produce of these mines may be sent as far north as Ushant, where it will be met by the coals from the North of England and Belgium, thus including the intermediate ports of Santander, Bilboa, St. Sebastian, &c., on the coast of Spain; Bayonne, Bordeaux, L'Orient, &c., in France; and to the west and south, along the coasts of Spain and Portugal; and, when your supply can exceed these demands, you have a wide field for consumption in the Mediterranean.

After noticing the eligibility of the geographical position of the Tudela coal mines, Mr. Forster proceeds to offer an estimate of the price at which these coals may be afforded; and, not losing sight of the possibility of other collieries being opened in Asturias, he names 12*s.* 6*d.* per ton for the best, on board, which, he says, is considerably below that which will be obtained so long as the Tudela coals have only the collieries of England, Belgium, and the South of France, to contend with. The cost of extraction he puts down at 3*s.* 5*d.* per ton, including royalties; railway and shipping expenses, 3*s.* 3*d.*—making, on board, 6*s.* 8*d.*, and thus leaving a net profit of 5*s.* 10*d.* The cost of winning the colliery, including machinery, materials, &c., Mr. Forster estimates at 21,166*l.*; and the cost of working 100,000 tons of coals to be 29,291*l.*, and the sales, 31,145*l.*—thus affording an annual profit of 21,854*l.* In this estimate, the several items are put down.

To complete the report, Mr. John Thos. Cooper, lecturer on chemistry, and chemical assayist, was directed to inspect the same coal district, in company with Mr. Forster, and other gentlemen; and subjoined is his report on the quality:—

While making the necessary examinations, I carried samples, indiscriminately selected, of some of the larger seams to be taken under my own immediate inspection, which samples were then, to my presence, secured in a box, to be sent to England, for the purpose of examination and analysis. Shortly after their arrival, I commenced that examination; and I am happy to have it in my power to state, as the following results will show, the excellent quality of those samples. The following will show the results of a very careful chemical examination of three of the veins:—

Canna, or 1 yard Coal.

Coke	69·2	{ Carbon, 69 Earthy matter and oxide of iron, 2·2
Volatile matter	31·8	Water, gaseous products and sulphur.

Rioseruela, or 5 yard Coal.

Coke	69·0	{ Carbon, 6·9 Earthy matter and oxide of iron, 1·1
Volatile matter	31·0	Water, gaseous products and sulphur.

Viesa Alta, or 6 yard Coal.

Coke	69·6	{ Carbon, 69·3 Earthy matter and oxide of iron, 2·3
Volatile matter	30·4	Water, gaseous products and sulphur.

The quantity of sulphur is pretty uniform in the whole of the specimens, and does not amount, in any case, to 1 per cent. From these examinations, I am led to the conclusion, that the above three qualities of coals are, in every respect, as well adapted for the purpose of raising steam, for founder, forge, and other similar uses, for the manufacture of iron, and for household purposes, as any of the coals of Great Britain, that have ever come under my observation. But in it to be remembered that the other veins, to which Mr. Forster has alluded in his report—making in the total of fifty-four feet in thickness on the whole, are in no way inferior to the above in quality.

Mr. Cooper then goes on to describe the immense and ore abounding near these coal mines; and, after offering a separate analysis of each, and estimates of the cost of manufacturing iron, he concludes his report with these words:—

Independently of what I have just stated, as objects worthy of your serious attention, I may be allowed to observe, that the habits and character of the population of this part of Spain differ, in many respects, from those of the Spaniards in general. As far as I have been able to observe, the Asturians are an orderly and industrious people—sober and confidential in their manners, and very active in their habits; they are contented with small earnings, the wages of a labourer, as far as I have been able to learn, not exceeding 10*d.* per day, and that of an artizan, such as a carpenter, mason, or smith, 1*s.* 3*d.* or 1*s.* 6*d.* To the unrivalled position of the province, and primitive habits of the inhabitants, must be attributed the maintenance of the simple wants of the simplest constructions for accommodating time and labour. Agriculture seems to engross their utmost active attention, and the labour which they bestow upon the raising of their crops, and in bringing small portions of mineral harvest each, on the cities of the mountains, into a good state of cultivation, may be instanced as a proof of their persevering industry. With regard to the amount of the population, I had no very accurate means of ascertaining, beyond that of observation, during

* The iron Queen has been coated with the mixture here alluded to, and has returned from her third voyage to South America, entirely free from fouling. The *John Harvey*, also, has just completed a voyage to New Orleans, and is in excellent condition; no tendency to fouling has been perceived.

my stay in the Tuleta district; but I found that, when labourers were required for any operations, they were easily obtained. Among that class of men there was a complaint of the want of employment; the labour in the fields, for the most part, being carried on by the women. The fact, I believe to be, that, as the Asturian—perhaps from its isolated position—never having been a seat of the civil war, and, consequently, exempt from its depopulating effects, there is an excess of the labouring population, so an evidence of which, I learnt that a large portion of that class annually migrate from the Asturias into the more fertile southern provinces of Spain, during those months which an abundance of hands is required for securing the harvest. Taking into consideration the superabundant quantity of the coal, the facility and consequent cheapness with which it can be worked, and the large quantity of iron ore and stone, but especially of the former, in the Tuleta district, coupled with the low price of labour, I am of opinion that a good opportunity here presents itself for a safe and profitable investment of capital.

The above two reports were submitted to Alexander Jamieson, L.L.D., consulting civil engineer, who, after a review of all the facts resulting from them, came to the conclusion, "That the company has good coal and iron ores in the concession of Tuleta, with the markets of the world open for all it can produce."

After the evidence which I have adduced of the existence of coal, to a great extent, in Spain, and the facilities of obtaining it, if science and capital are once employed in the Asturian collieries, I must leave the subject to take its chance. It has been my endeavour to point out the great and growing consumption of British coke and coals among the Mediterranean smelters, and the great apprehensions which they entertain of their usual supplies being cut off, in deference to the Asturian collieries; and, in performing this task, as far as I could, I have left the Spaniards to speak for themselves. On a general review of the question, it will have been seen, that the Central Mining Junta, in accordance with the spirit of their institution, have acted fairly and energetically, as the representatives of a large and valuable interest, in using their efforts to secure an adequate and cheap supply of fuel; and, after the courageous manner in which they have spoken out, even on a question to which countrymen of their own are parties, it is but reasonable to expect that the British coal proprietors—aye, and the Government also—will do everything in their power to second their wishes. An export duty on our coals is actually a bounty to the Asturians and others to work their own collieries; and, if this matter is allowed to drop, we shall awake from our lethargy by finding that we have been excluded from the consumption of the Peninsula, and other parts of the Continent. W. W.

London, August 9.

STEAM WHIMS—IMPORTANT TO MINERS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am given to understand that the adventurers of Stray Park Mine, through the advice of their manager, have contracted to draw to surface every description of stuff broken underground, at a fixed sum per month. As the particulars which I have gleaned would seem to justify an expression of credit for so bold a step in the way of economy, I should be glad (with a view to the confirmation, or otherwise, of the statements in my possession) to ascertain, through the medium of some of your correspondents, the precise nature of the contract, before expressing my views on the subject. I hear that the steam whim was erected, with all the connections pertaining thereto, free of cost to the adventurers, and now the stuff is drawn at a trifling expense, with an indemnity from every charge of material and labour. I should like to know whether this instance will tend to prove that the system invariably adopted in infant speculations, of contracting for the raising of the stuff by horse-power, is equally applicable in mines of greater depth and magnitude requiring steam.

August 9. A SUBSCRIBER.

IMPROVEMENTS IN TREATING ORES AND OTHER MINERALS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In your last publication allusion was made to a patent granted to Mr. Longmaid, of Plymouth, for a new method of treating ores containing sulphur combined with various metals, having for its object the more complete separation of the matters contained therein, and also acquiring a larger number of products than have heretofore been obtained. As an individual largely interested in mining property in the county of Cornwall, I did not fail to perceive at once the prospective advantages that must result to the mining interest from the successful issue of the experiments set on foot by the Plymouth Patent Alkali Company—a company formed for the purpose of carrying out the views of the inventor—and through whose kindness I have since been permitted to witness the progress, and the success, which appears to me to be complete, of those experiments, at their works.

I collected from Mr. Longmaid the information that, in conducting a long series of experiments, with the view of discovering some method by which the vast quantities of sulphur annually dissipated in our mining and smelting operations might be economised and rendered available, he had discovered that the sulphur of metallic ores entering into combination in contact with common salt formed sulphuric acid, and was at once combined with the base of the salt; thus the sulphate of soda was produced at a single operation, whilst the metallic portions of the ore were completely separated, and fitted for further process of reduction, and the chlorine of the salt was set free at the same time. Although these facts had long been known to the scientific world, yet they had never been applied to any practical use. Mr. Longmaid has, it appears, accomplished what has long been felt to be a desideratum by the metallurgist; and the advantages held out by his process, both to the miner and manufacturer, I consider, cannot fail to bring it into immediate and general use.

It will be apparent, that the main advantages contemplated by this process are—the bringing the vast quantities of sulphur ores, other than those wrought for the metals, with which Great Britain and Ireland abound, into paramount consumption, displacing volcanic sulphur to a corresponding amount; and, when applied to the ores of Cornwall, containing tin and copper, sulphur, and iron, obtaining these four products—whilst, in the ordinary mode of treating such ores, one of the metals only is obtained. By this process, I am informed, the oxide of tin, or black tin, is increased in produce, and the quality of the metal improved; ores, containing a small per centage of both tin and copper combined with sulphur, but not in sufficient quantity to repay the necessary charges for obtaining either metal in the ordinary mode, might be thus treated profitably, and thereby rendered available; and last, not least, it would tend to create an increased demand for labour in our mining districts.

I am sure, from the interest you have ever evinced in the development of the vast mineral resources with which this county abounds, the above particulars cannot fail to be highly interesting to you, and not less so to a large majority of your numerous readers. It was my intention to have taken some notice of the manufacture of alkali; but, as I do not profess to have much chemical knowledge, and my attention being more particularly directed to the subject on the score of economy as affecting the produce of our mines in this county, I shall leave this point, which I believe to be well worthy of notice, to abler hands. A CORNISH MINER.

Redruth, August 7.

[We are obliged to our correspondent for his communication, and shall gladly add contributions of any further information on the matters contained in the patent, to which we already occasionally advertised, more especially as we are led to believe that the subject has excited considerable interest in Cornwall.]

LIFE BOATS — SAFETY SWIMMING BELTS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Permit me to say, that I am of the same opinion with yourself and Mr. Murray—that, if the Pegasus steamer had been adequately provided with good safety swimming belts the whole of the lives which were lost might (under Providence) have been saved; and that, it will be a long time before those belts will be brought into such general use as they ought to be, unless the Government of the country, by a legislative enactment, cause them to be so. This would do the thing at once; and it certainly belongs to the Legislature of the country to look after the safety of the lives of her Majesty's lieges, and I have now no doubt whatever of their very soon doing so; at the same time, I think it would be well if Mr. Murray would commence a correspondence, for the purpose of eliciting them on the subject.

I have but leave to say to my good friend, Mr. Murray, that it is of no use to put cork-wood into the inside of his life boats—he may fit the inside up to the gunwales, and after all do no good; and, when he tries the experiment, he will find that I am correct in him. The cork-wood must be placed outside, so as to come immediately into contact with the water. I have not an atom of cork-wood inside of my model of a life boat; but I have enveloping bundles of cork-wood jammed close under the gunwale all around, and which hang down perpendicularly, and operated upon by the water, when they naturally rise to a horizontal position, but cannot get further up, owing to their being kept back by strong pieces of cork, and, as the water leaves them, go as naturally down to their resting perpendicular position.

As I believe that Mr. Murray writes upon the subject principally from motives of humanity, I have recommend to them not this boat to him, which, I am sure, he will soon understand, if he does not already.

45, Fountain street, Manchester, August 5. W. ANDREWS.

ON THE LIGHTING OF RAILWAYS—No. II.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Agreeable to promise, and in connection with my last letter to you on the above subject, permit me to lay before you another most important and serious want, that has all along been felt—viz., giving signals at night, from the guard to the engineman, to make him stop, when the train is at speed, in case of accidents. At the present time, the guard has no means of communication with the engineman; if so, there has been no explanation given, nor any plan, as I am aware, adopted as yet. This is a subject of such importance, I scarcely suppose you will refuse me a corner of your useful and valuable Journal for practical information, in giving you a description of Mr. Rettie's original plan of "bringing the guard to the engineman," or the "engineman to the guard," though at the distance of twenty carriages: Yes, more—if the train be on fire, it will cause the engineman to stop!—and this being the invention of a practical man, who has devoted much labour and expense for the improvement and advantage of railways, it is a publication such as yours that presents the only means of getting them brought before those parties immediately interested in adopting them.

The plan laid down by Mr. Rettie is simple; and the inventor having given me full liberty, I now send it for your columns:—

1. In cases of fire, in the waggons, goods, or carriages, there is an absolute necessity for speedy and immediate communication with the engineman. This has never been done until now, and Mr. Rettie accomplishes this by placing a powerful reflector on the "engine" or "engine chimney." The consequence is, from the position of the "engineman," "the fire," or "light" of the same, is seen by him in the reflector—and, in fact, which cannot escape his eye, if he is awake—and causes him to stop, preventing, in cases of fire, much mischief from being done, in consequence of the train moving on, adding fuel to the flames, by the accelerated action of the air upon the fire; whereas, had such a reflector as this been before his eyes, the engine would have been stopped, less damage would have been done, and several lives saved, as upon the "Liege line" the other week; and, when railways adopt useful plans, and take every precaution within their reach in case of accidents, the public feel more at ease upon those lines who spare no trouble and expense to keep them safe, independent of viewing the matter in a pecuniary view, as relative to the interest of railway prosperity and economy.

2. That guards upon trains of seven, ten, fifteen, or twenty carriages, have, over and over again, both by day and night, been much put about for want of speedy or instant communication at night with the engineman—as, when anything got loose, or fell off, or any accident occurred (at night especially), before the guard can communicate to the engineman to stop they were on four miles! perhaps, it was then too late!! But this is also obviated by Mr. Rettie as follows:—Each guard has a small lamp fixed by a belt round the waist, which leaves his hands clear. This lamp is portable, with "slides" similar to the last, but vertical slides; and, when held up by the guard, or standing up with the same even on his breast, it will be reflected on the mirror above the engine, though twenty carriages off, when he can display, as the occasion may require, any of these colours—If to slow, green; if to stop, red; if all's right, white; and this light, in an instant, conveys from the guard the word of command to the engineer to stop, or it may be to the police, even though ten, fifteen, or thirty carriages should intervene; and, if anything has gone wrong, the engineer will stop, and then get it rectified. Now, this is so simple and easy, that it only requires to be understood to bring it into general use, and if railway directors or managers will give it a fair trial, I feel assured that it will amply repay them, and save, in cases of fire, many accidents, and much expense; and, though last, not the least, perhaps, many valuable lives. Excuse me for again troubling you, but the importance of these improvements to the public are such, that "railway directors" cannot too speedily be informed of such valuable inventions, and give them a fair and "impartial trial." The expense is but a bagatelle, and, if found practicable (which I know they will), and combined with additional safety to the public, it is a "desideratum" which has long been felt, and may be said to be now accomplished.

A FRIEND TO RAILWAYS.

P.S.—This plan is also part of communicating to the police on the road stations; also, the police ought to have the same lamp as the guards, to communicate along the line, or to stop the train. This new system of Mr. Rettie's is able to be carried out, and made much more useful than many are aware of, and if any of the great English lines were to adopt the same under his own arrangement and superintendence until in operation, it would be the fairest way to have it tested.

PARIS AND LYONS RAILWAY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—You can be of great service to the shareholders of the Paris and Lyons Railway, if you will use the same powerful test and take at their behalf which you have been at all times ready to do when occasion required. I wish to call your attention to the prospectus issued by the directors on their first bringing the affair before the public; you will there perceive what advantages they offered—stating that the French Government would grant such liberal terms as delivering, free from all charges, the land required for the line—would complete bridges, earthwork, tunnels, &c.—likewise build all stations and termini; furthermore, in that prospectus they combined with their own respectable names three French directors, whose name and power would have been a host in the Chamber of Deputies. I have only to refer you to your own Journal of the 17th of June, where those three gentlemen state that they were not in any way parties to the prospectus; and likewise to a letter the new directors sent to the shareholders, on which you have commented in your Journal of the 23d July, and from which it appears that all the advantages referred to may not now be had. It is thus apparent, that, as the directors have not been able to succeed, they are in justice bound to return the deposit money; they have failed in their contract, and, consequently, have no further right to hold the same; they all bear the character of high principled men, I hope they will not sully their good name by not acting fairly.—I have, on all occasions, been your firm supporter, and will think you to lend your helping hand in return. C. L. B.

London, August 8.

[We think the best way of accomplishing the object of our correspondent is by giving his letter insertion. Our attention has been drawn to the subject by several subscribers; and we may have occasion, in an early Number (if not next week), of offering some observations on the terms of the prospectus and the circular referred to. We think the fair course would be, to allow parties to withdraw their deposits, less their proportion of expenses, and leave to those who are willing to wait six months the option of retaining their interest—the shares unappropriated, or the deposits on which may be withdrawn, being then subscribed for. We believe the prospectus states, that, "in case the company shall not be definitively constituted, the deposit money will be reclaimed from the Government, and, upon its receipt from them, his deposit will be returned to each subscriber, without any deduction whatever." This will, doubtless, be done by the directors; but it appears the company contemplate being "definitively constituted"—and we have no evidence that the deposit has been withdrawn from the Government.]

VENTILATION OF MINES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Notwithstanding this subject has been so frequently brought before the mining public, both by myself and your more able correspondents, I fear but little has yet been done. One would have thought that the frequent appeals which have been made to self-interest (the most powerful, because the most predominant, motive in almost every man's mind), would have been quite sufficient; but the higher claims of patriotism and of Christian philanthropy, which have been, from time to time, urged upon the attention of the subscribing, ought, ere this, to have accomplished something. The physical condition of our miners is still being undermined by their being, for want of other employ, still compelled to work in places in which a candle will not burn without being inverted. I met a miner last week, who informed me that he has, till this time, been a strong man, but that being now working in bad air he feels its effects very much on his health and spirits. How long are our people to be thus poisoned? It has been proved, over and over again, that an impure mining atmosphere is not a necessary contingency, no matter what the nature of the "pitch." It is time our mine agents, who are, generally speaking, men that soon, should look to this matter; as, after the full discussion which the subject has now received, there can be no excuse on the ground of mere ignorance, or an overwhelming desire to be economical, if economical it be in any point of view. I do hope and trust that my model of a machine for drawing out the foul air [see *Mining Journal* of the 27th May], which model has been sent for exhibition at the next Cornwall Polytechnic [from which exhibition I learn no profit], will have the effect of showing the practicability of my suggestions, or of inducing the parties interested to try some other plan, as it is really monstrous that hereditary diseases should be entailed on the miners, by a cause whose effects are so manifest and so palpable as the stink itself. If barrels pipes can be conveyed over a town, they can surely be carried throughout the working of a mine, without much reducing the size or bore of the pipes towards their termini. The presence of the atmosphere will prevent a vacuum; what is wanted appears to be extraction of foul, or circulation of supply of pure, air in some way or another. This end and should be done at any cost, for the life of man is too valuable to be sacrificed even to pounds, shillings, and pence; for it is written, "At the least of every man's brother will I require the life of man."

Penzance, August 8. ANCORA ET L. MARINO.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Of all the reports of mining and other companies, published in your valuable Journal, that of the Consolidated Copper Mines of Cobre Association, may be pronounced the most meagre in detail, and the most barren of information, both as regards the shareholders and the public. A secrecy envelopes the proceedings of the directors that is, and must continue to be, more and more injurious to the association, as its necessary tendency is to decrease confidence, and thereby materially reduce the value of their property, by engendering suspicions which, probably, may have nothing like a real foundation, nor can we be surprised that this should be the result, when the smallest quantity of information is doled out to the shareholders, and all beyond this, is obtained by questioning and cross-questioning, and very considerable dissatisfaction was expressed at the last meeting, at the very great expenses of the company, and the very small amount of dividend. The Royal Santiago Association, publish their accounts, and why should not the Cobre do the same? What necessity is there for secrecy with the one more than the other? Now, Sir, any person would suppose the affairs of this company to be in a bad state, and it is very reasonable they should, for so much unwillingness to give information is generally a sure indication of such being the case, but in this instance it is not the fact; look at the large quantity of ore imported in the past year—20,145 tons, producing about 236,000*l.*—but it is the enormous expenses that absorb the proceeds; to place this quantity of ore in the market has cost upwards of 225,000*l.* Why, the management abroad and the management at home (but especially the former) swallow up everything; there goes the lion's share, and the shareholders get only the bones to pick. Now, will the directors be so kind as to explain how it is that 20,000 tons of ore can, or ought to, cost the Cobre Association 225,000*l.*, whilst with the Royal Santiago Company, the same quantity would cost about 130,000*l.* (see report in *Mining Journal*, July 15, 1843), a difference of only 95,000*l.* in favour of the Santiago management, and be it remembered these mines immediately adjoin each other, indeed they are so intermixed that there is now a litigation between them as to the right of working some new ground. If the directors of the Cobre Association will explain this difference of expenditure satisfactorily, I feel assured the shareholders will readily accept it. The disbursements at Cuba have increased most amazingly; in the year 1840 they amounted to 114,000*l.*, in 1841 to 140,000*l.*, and in 1842, to 129,000*l.*, and it is to the less expenditure in 1842, compared with 1841, that the shareholders are indebted for their dividend at this time, but why should there be an increased expenditure at Cuba in 1842, compared with 1840, of 15,000*l.*, and in 1841 compared with 1840, of 26,000*l.*? The proposition for reform and retrenchment cannot be looked for from Cuba. It is not in human nature that a man holding a good situation should himself propose its abolition; the directors at home are the power the shareholders are looking to for a large, a very large, reduction of our expenses at the island. I will not now trespass further upon your columns, but may, probably, with your permission, resume the subject at a future period.

London, August 10. A SHAREHOLDER.

[We presume that our correspondent might readily acquire the desired information, as well as explanations, on applying to the secretary of the company. We have found, on more than one occasion, that particulars, which the directors might consider unnecessary to embody in a report, have been readily given to a proprietor, on a courteous application at the office of the company. We shall be most ready to afford "A Shareholder" every assistance in our power in arriving at facts, but would recommend a personal application on his part—and he will, perhaps, communicate, through our columns, the result of his inquiries.]

TRESAVEAN MINE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Seven years since, this mine was yielding dividends to seven times the amount it has during the last year, and the present rate of dividend will cease at the next account-day, and be reduced, say from 15*l.* to 10*l.* per share. This the out-shareholders should be prepared for, and I know no way of their being so enlightened but through the columns of your Journal. The levels are poor, generally; and a share was sold on Monday last, to a gentleman of Falmouth, for 70*l.*, which is much under the quoted price of 90*l.* in your last Number.—*Camborne, August 1.* TRETIS.

[We believe that the state of the copper trade, and decline in the standard, will offer some answer to our correspondent. We shall readily give insertion to any information or explanation which may be tendered, and shall endeavour to obtain such from the office of the company.—Qy. Is "Tretis" a buyer, and what limit will he give us? Evidently, he is no seller.]

WEST WHEAL JEWEL.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—You will judge of my astonishment, when, upon my arrival here last evening, I was informed that this very "promising and prosperous concern," at their sale on Thursday last, realised a loss, instead of a profit, equal to 300*l.*,—so that, although the reports are constantly boasting of great riches, we shareholders are not to have them realised. I, moreover, learn that the principal agents (who reside here, six miles from their work) meet more frequently at their own houses, than on the mines, to conjure up the "tales" they transmit to town; but the worst of all is, that a *call on our purses is actually in contemplation*, as the lords refuse to allow the rates upon the reduced rate of dues, and our ore is not so good as reported. Truly, there is "something rotten in the State of Denmark." A COMMERCIAL.

Camborne, August 3.

[We can imagine that a loss may occur in one month's cost sheet, and yet not affect the value of the mine. If such losses continue, a call is a necessary consequence.—We do not "go the whole hog" with our correspondent, as regards the reports, or "tales," transmitted to town, inasmuch that it matters not where they are written, if they be founded on correct data. Had "A Commercial" (who appears to be no "miner") told us that the agents were neglectful of their duty in inspecting and attending upon the mine, it would have been a fit subject for inquiry; but we think it matters little where the "tales" are written, so that they be not "fairy tales."—As to the reduction of dues, if the copy before us is right, we think our correspondent was full "six miles from the mine" when he wrote it, for it is hard to comprehend his reasoning.]

IMPROVEMENTS IN PRACTICAL MINING—SHAFT-WORK.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In your paper of the 22d ult., I discover a statement in reference to the climbing-engine at Tresavean, the erection of which, being placed to the account of humanity, has turned out advantageous in point of working economy. This is no more than I said of it some years ago in the Institution room at Penzance, when exhibiting the model then obtaining the premium. In the present instance, here are those already rich saving a "very considerable sum" from the varied thoughts of the inventors; I have no sentiment to oppose on this, except that, as a correct inventor, I come also as a poor man before the tribunal of their consciences, my business being more particularly to communicate to all *bona fide* adventurers my wish to superintend the erection of my own shaft-work, and to state my conviction that safe and efficient ladder-work may be rendered on my principle, in any shaft that I have seen, at one-third of the expense per 100 fathoms of that at Tresavean; and, in being allowed to conduct the thing myself, if the cost exceeded half, I would not claim a penny for my time and attention to it. It may not be amiss to remark, that my business calls me to the observing of shafts and shaft-work, and that this is not a random statement. J. PHILLIPS.

Illogan, August 7.

ON BOILERS AND FURNACES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have seen a correspondence in your Journal between "Investigator" and C. W. Williams, Esq., of Liverpool; although resident here, I beg to state, that "Investigator's" letter was not inserted in your Journal by me, or with my authority; but, being much interested in the subject, I have enclosed a copy of a letter, which I think Mr. Williams should address you, filling up the blanks, as the case may be; there are some minor points which might have been referred to, but if the blanks are filled up, as stated, I will refer to those minor points hereafter. JAMES M. SCOTT.

Greenock, August 5.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—On the boiler I have constructed at Liverpool, which can be worked either with or without my patent, I have produced the following results:—Without the patent, I have evaporated ... lbs. water with ... tons of coal in ... hours; with the patent I have evaporated ... lbs. water with ... tons of coal in ... hours.

[To be signed by] C. W. WILLIAMS.

[As the best means of enabling Mr. C. W. Williams to reply to our correspondent, we have inserted the preceding letter, with the form prescribed.]

THE MAMMOTH ENGINE.—On Thursday week the enormous cylinder of 144 inches diameter, for the great engine designed to drain the Haarlem Lake, was cast at the foundry of Messrs. Harvey and Co.; it is the largest cylinder ever cast either for any purpose—a blind cylinder of 144 inches bore, indeed, have constructed in this place, but this was cast in parts. The largest cylinder ever made for mining purposes was of the diameter of ninety inches and a fraction, and it was bored, a few days since, that the cylinders for her Majesty's steam frigate *Penelope* were the largest ever cast, being ninety-two inches in diameter. The cylinders of the *Penelope* are only two-fifths the size of that cast last week at Hayle, the pistons of one containing 6647 square inches, that of the other 16,513. The operation was completely successful. More than seventy-five tons of iron were melted for the casting, and the whole of that mass of liquid fire was run into the mould in less than six minutes, in a manner that afforded the highest satisfaction to a great number of intelligent visitors who were kindly allowed to be present; and a single casualty unoccurred. This most undertaking reflects the highest credit on the proprietors, agents, and workmen employed. The inhabitants of Hayle may now justly boast that they have executed by far the greatest work in their line which has ever been attempted, and we hope we are not too sanguine in anticipating that their unprecedented exertions may be appreciated by foreign Governments, will ample for them a share in the patronage of our own.

MINING CORRESPONDENCE.

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

August 7.—Hitchins's shaft is now sunk 3 fms. 3 feet 6 inches below the 100 fathom level; there has been but little ground sunk in this shaft during the past fortnight—the pumpmen having been employed in altering the old pitwork and putting in two plunger lifts, one from the forty fathom level to the sixty-two, and one from the sixty-two fathom level to the 100. The pitwork arrangements are now complete from the surface to the latter level; we have also, during the past week, been engaged in taking up some of the old pitwork in Wall's engine-shaft, fixing new plunger-lift from the seventy fathom level to the 100, cleansing boiler, repairing engine gear, &c. In the 110 fathom level, on the south lode, west of Wall's shaft, the lode is ten inches wide, and worth 12*l.* per fathom; on the north lode, east and west of Goldsworthy's winze, at this level, the lode is nine inches wide, and worth 8*l.* per fathom. In the 100 fm. level, west of Hitchin's shaft, the lode at present is much disordered, being divided into branches, and worth about 5*l.* per fm.; in the rise in the back of this level the lode is fifteen inches wide, and worth 25*l.* per fathom; the lode in the stopes, in the back of this level, is eighteen inches wide, and worth 33*l.* per fathom; in the cross-cut south of Wall's shaft, towards the Flapjack lode, but little alteration since last reported. In the ninety fathom level, west of Hitchins's shaft, the lode has a very promising appearance, being sixteen inches wide, and worth 10*l.* per fathom; in the eastern stopes, in the back of this level, the lode is fifteen inches wide, and worth 25*l.* per fathom; in the middle stopes the lode is eighteen inches wide, and worth 20*l.* per fathom; and in the western stopes the lode is two feet wide, and worth 45*l.* per fathom. In the eighty fathom level, east of Wall's shaft, the lode is twenty inches wide, and worth 14*l.* per fathom; in driving west, on the north lode, there is no alteration since last reported; at this level, west of Hitchins's shaft, the lode is ten inches wide, composed of capel, spar, and mundic; the lode in the stopes, in the back of this level, is fifteen inches wide, and worth 13*l.* per fathom. In the deep adit level, east of Lady Beam shaft, the lode is eighteen inches wide, composed chiefly of capel, with some spar and mundic. T. RICHARDS.

CORNUBIAN MINING COMPANY.

August 5.—The lode in Murray's engine-shaft, sinking below the sixty fathom level, continues still to be very good, worth about 50*l.* per fathom; the price given this day for sinking the shaft is 8*l.* per fathom. The seventy fathom level, driving west of the great engine-shaft, is very wet; the north lode is three feet wide, composed of mundic, spar, and some lead. We are still driving a cross-cut south at this level, to intersect the south lode; the end is passing through branches of lead that will set on tribute. In the sixty fathom level, west of Murray's shaft, our intention is to drive north, to see the north lode; the Chiverton lode here is at present unproductive for lead. In the winze sinking below the sixty fathom level, we have good orey ground; the lode we calculate at present to be worth 25*l.* per fathom. The prospects in the stopes in the back of the sixty fathom level are much the same as have been for some time past—yielding rich quantities of work. To-day, we held our public setting for August—particulars you have forwarded you, as the setting report, by this post. J. WEBB. R. ROWE, Jun.

WEST WHEAL JEWEL MINING ASSOCIATION.

August 7.—There is no alteration in the ground in Buckingham's engine-shaft. The eighty-five east, or Wheal Jewel lode, is fifteen inches wide, spar and stones of ore; the branch is only nine inches north of the lode, and will produce one ton of ore, worth 5*l.* per fathom; ditto west, on the same lode, is nine inches wide, unproductive. The seventy west, on this lode, is worth 12*l.* per fathom—this is composed of strong yellow ore; ditto east, we are driving to cut this lode on the east side of Little cross-course; ditto east, on the south branch, is fifteen inches wide, containing good stones of yellow ore; we have no doubt that, as we leave the cross-course, this lode will prove productive. The winze sinking under the seventy east, on Wheal Jewel lode, is worth 15*l.* per fathom, and still promising to improve. The fifty-seven east, on Buckingham's lode, is worth 6*l.* per fathom. The thirty east, on Wheal Jewel lode, is worth 14*l.* per fathom. S. LEAN.

UNITED HILLS MINING COMPANY.

August 8.—The lode in Williams's shaft is 4 ft. wide, producing some good stones of ore on the north part. In the seventy fathom level, in driving east, the lode is three and a half feet wide, two feet good ore; and in the western end the lode is five feet wide, eighteen inches on the north part ore of fair quality. In the sixty fathom level, east of eastern shaft, the lode is two and a half feet wide, nine inches good ore; west of diagonal shaft—lode four feet wide, ore throughout, coarse in quality; east of James's shaft—lode ten feet wide, six feet ore of average quality; east and west of Nettle's winze—lode four feet wide, two feet on the north part producing ore; in the winze sinking below this level, east of eastern shaft, the lode is three and a half feet wide, eighteen inches good ore. In the fifty fathom level, in the end, the lode is three and a half feet wide, fifteen inches ore of very good quality; nothing done in the winze—the men are still engaged stoping the bottom; west of the winze the lode is two feet wide, good ore; in the diagonal shaft the lode is three and a half feet wide, one foot on the north part ore of average quality. In the forty fathom level, in the winze, the lode is three and a half feet wide, orey throughout, but not rich; Gibson's shaft—no alteration for the past week; Hill shaft (north Sparrow)—lode two feet wide, producing a small quantity of ore. In the twenty fathom level, on Stacey's lode, in the eastern end, the lode is eighteen inches wide, six inches good ore; western end—lode eighteen inches wide, one foot ore of good quality.

N. LANGDON. S. H. PEARCE.

TRELEIGH CONSOLS MINING COMPANY.

August 7.—The fifty, east of Good Fortune, is fifteen inches wide, and worth 4*l.* per ton; ditto west, is two and a half feet wide, and worth 20*l.* per fathom; the pitch above this level is quite as good. The forty-four west is four feet wide—a kindly lode. The thirty-four west is two and a half feet wide, and worth 3*l.* per fathom. At Christoe the eighty west is one foot wide, looking rather kindly, but little ore. The seventy east is eighteen inches wide, very little ore. The sixty east is three feet wide, producing good stones of ore; this level has a kindly appearance. The fifty east is worth 4*l.* per fathom. W. SYMONS.

CALLINGTON MINING COMPANY.

August 7.—In presenting you with the weekly report of these mines, I beg to say that Mr. Johnson has attended for the purpose of pointing out sundry underground and surface work, which he wishes to have carried out immediately, and for which purpose we have a public setting, described in our setting report, forwarded with this. The north engine-shaft is sunk about two fathoms below the sixty fathom level; the ground is favourable. The lode at the sixty fathom level driving south is improved; the ground is much softer. The fifty fathom levels, on the silver-lead and copper lodes, continue much the same. At the forty fathom level, on the silver-lead lode, we are driving through tribute ground. Our tribute pitches are looking favourable.

J. T. PHILLIPS.

CONSOLIDATED TRETOIL MINING COMPANY.

August 7.—The lode in the fifty fathom level, east of Heawood's shaft, is nine inches wide—tribute ground; we holed the rise in the back of this level, east of Heawood's shaft; we have suspended the fifty fathom level, west of Heawood's shaft, until the rise is holed, not having sufficient air to drive the end and to rise at the same time; the lode in the rise, in the back of this level, is one foot wide, good tribute ground. The lode in the forty fathom level, east of Heawood's shaft, is fourteen inches wide, good tribute ground; the lode in the rise, in the back of this level, is one foot wide, very good tribute ground. On Friday last, it being our setting-day, we set our new engine-shaft to sink six fathoms at 1*l.* per fathom.

H. WILLIAMS. J. MORCOM.

TINCROFT MINING COMPANY.

August 7.—I beg to hand you my report of the state and prospects of this mine. The lode in the seventy fathom level east continues large, and very promising, worth about 12*l.* per fathom; the west end, same level, is worth 30*l.* per fathom. Driving south, from the sixty east, we expect to cut the lode in a day or two, as we have already drained down the water from the winze sinking under the fifty, on same lode. The sixty west continues to yield good ores, worth 16*l.* per fathom; the back of this level, east and west of the shaft, is let at an [illegible] tribute. The lode in the fifty east has very much improved in the past week; it is now worth 25*l.* per fathom, leaving back and bottom that will work at low tribute; the lode in west end, same level, is small, yet very promising. In a winze now in course of sinking from the level above, just before this end, we have a good lode, worth about 20*l.* per fathom. The lode in the fifty west, on the counter, is worth about 15*l.* per fathom. The lode in the forty east is three feet wide, producing good work for tin and copper ore, worth 20*l.* per fathom. The lode in the forty west is about twenty inches wide, composed chiefly of mundic. Our pitches in this part of the mine continue to look well. At Palmer's we have almost communicated the shaft with the sixty-five fathom level; after that shall have been done, we shall sink on the course of the lode below the sixty-five, and drive that level west, by which we expect to lay open tribute ground. We are still raising some good ores from the rise in the back of the fifty-five. At the north mine, the 100 end is yielding a little tin stuff, but not rich. The winze sinking from the ninety, on the same part of the lode, is producing but little tin, yet this we want to communicate for the sake of ventilation, that we may come out to the south lode. The ninety west, on south lode, continues to yield fair quality work for tin, with some copper ore. The stopes in the back of the ninety and back of eighty-one continue to produce good work for tin, worth about 15*l.* per fathom, stoping at 4*l.* per fathom. The eighty-one end, on same lode, is worth about 10*l.* per fathom. On the whole, I am glad to say, our prospects are very cheering. We hope to get our new whim to work in eight or nine days. W. PAUL.

TAMAR SILVER-LEAD MINING COMPANY.

August 7.—In the 135 fathom level the lode is about one foot wide, producing saving work. In the 125 fathom level the lode is two and a half feet wide, producing some good work. The 115 fathom level is not driving for the present. In the 105 end the lode is three feet wide, one foot of which is good work. In the ninety-five fathom level the lode is eighteen inches wide, very promising. In the eighty-five fathom level the lode is two feet in width, producing some promising work. In the seventy-five fathom level the lode is eighteen inches wide, composed of fluor-spar and capel, with a small quantity of silver-lead ores. In the sixty-five fathom level the lode is two feet wide, of just the same quality and appearance. In the fifty-five fathom level the lode is two feet in width, composed chiefly of fluor-spar, but poor for silver-lead ores. In the thirty-five fathom level the lode is eighteen inches wide, producing saving work, but not rich. At the north mine the men are still engaged in sinking under the thirty fathom level, and cross-cutting west at the same level. At Wheal Hancock the engine-shaft is about fifteen feet below the surface, and in a favourable way for sinking. The foundation for the engine-house, &c., is cleared out. J. SPRAGUE.

BEDFORD UNITED MINING COMPANY.

August 7.—The lode in the forty fathom level, east of Blount's engine-shaft, is about eighteen inches in width, composed chiefly of mundic and spar, with good stones of copper ore. In the thirty-five fathom level, west of the new engine-shaft, the lode is just the same as last reported—looking equally promising; ditto, east of the new engine shaft, the lode is about three and a half feet in width, composed of the finest gossan and spar, intermixed with black and grey copper ore; this level is fast coming in under the ore ground opening and holding down in the winze above, from the twenty-five fathom level, in which the lode is looking uncommonly well, being about two feet in width, of black and grey, and also yellow, copper ore, and worth from 14*l.* to 15*l.* per fathom. The pitches continue to turn out very well, and our next sampling of forty tons will be of an improved quality. J. H. HITCHINS.

FOREIGN MINES.

UNITED MEXICAN MINING ASSOCIATION.

Guanaxuato, June 19.—I beg leave to refer to the enclosed duplicate of my last letter to the court, dated 19th May.

Mine of Rayas.—With reference to the general appearance of the productive points worked, both by the mine and buscones, no improvement whatever in them has been noticed since my last report thereon, but rather a further decline, both in quality and quantity, and which, unfortunately, does not hold out any immediate prospect of amendment, nor has any new discovery been made to repair, though partially, this diminution of returns.—Since the cessation of sales of such portion of the ores as are extracted solely for account of the mine—say, from the week ending 23d April to that ending the 10th inst., the quantity of such ores has yielded 3708 cargas, in a picked and clear state, ready for reduction of this quantity.

The owners of 12 bars, the Sardaneta family, have received	.... 2317½	cargas.
The association, in representation, of 6¼ bars have received	 1639	"
The Instruccion Publica, for 2¼ ditto ditto	.... 690¼	"
Total	3708	"

The mines half-share of the sales, on joint account with buscones, made during the same period, amounted to $17,015 4, and the total outlay or amount of memorias was $28,038 7 7—leaving, therefore, the sum of $11,023 3 7, as excess of expenditure, to be met by the value or returns receivable from the above mentioned 3708 cargas, which returns, however, it is difficult to estimate accurately, as such portion of the ores as are under reduction is yet in the early stage of that process, while the remaining part is still in the same state as received from the mine. On the other hand, the Instruccion Publica having realised, by sale, its share of such ores, produced in the four weeks ending the 20th ult. (say 210 cargas) some data is thereby afforded to make an approximate valuation of the remaining part, received by the other owners for reduction. The amount of sale on this occasion was $1589 7, against a proportionable outlay, or share of memoria, of $676 5½—leaving, therefore, a surplus of $913 1½ on 210 cargas; and, taking this result, and applying it to the afore-mentioned 3708 cargas (and I believe it will be borne out by the fire assays, already made at Barrera, of the 1030 cargas received there), the returns or surplus over and above the corresponding expenditure will be about $16,000 for the seven weeks from the 22nd of April to the 10th inst. Of the result of reducing the ores, instead of selling them, for account of the owners, no definite opinion can yet be formed, the first torta being still under the first-named process. Of the afore-mentioned surplus of $913 1 2, realised by the Instruccion Publica, the association has received the two-thirds, or $608 6 1, against the former debt of the mine, thereby reducing its portion of such debt to $69,162 4 4, and the general one to $357,360 4 4.

Rayas New Contract.—This contract still remains in abeyance.

Quicksilver.—I am much obliged to the directors for their prompt attention to my request of February last, in behalf of an extra supply of 100 bottles, in addition to the monthly sixty bottles. This very opportune and seasonable addition is very gratifying and acceptable to me, my actual stock in store on the 17th inst. having been reduced to 48 bottles. J. N. SHOOLBRED.

Note.—A remittance of $9307 has been received by this packet, and is the promised remittance of $10,000 (less the usual charges), advised in Mr. Shoolbred's letter of the 19th of May. JOHN MATHER.

BOLANOS MINING COMPANY.

San Clemente, June 10.—The partido system in the mines has exceeded my expectation in its good effects. The numbers of gangs of men in search of ore (independently of those employed on the mine account) has increased to an average of 110 by day, and as many by night, half which number have found work in San Clemente, and the other half in San Nicolas. A new life is thus given to these mines, and I expect a profit will be the immediate result. The enthusiasm of the workmen is really extraordinary, most of them working on insignificant threads of ore, in the hope that they will enlarge as they advance; some of them have realised these hopes, and this encourages the whole. The tatworks in both mines are much the same as last reported. The west end of San Fernando has been cut off by a fissure which has crossed the lode. The rise in San Mariano, the highest point in the mine of San Nicolas, has given good ores; we had them during last week about one foot in width, but they have since become narrower; the produce of this bunch, however, is encouraging, as it shows that the lode maintains its character at this point, where we have so large an extent of unexplored ground. Since I have become better acquainted with the mines, their value has, in my estimation, increased. Your agents have hitherto been under the necessity of devoting the whole profit of the mines to keeping up their working, and, confined to this, it is impossible properly to develope their resources. Twenty different ends and winzes might be driven in whole ground, besides those we have now in hand in the lodes of San Clemente and San Nicolas, but the expense of these works would be about $1000 per week, which is too heavy for my present means.

San Rafael Sett.—The end of Buen Suceso south has passed through the colorados of the Rayas lode, but still meets with small veins of quartz and metallic substances, through which it is necessary to drive. I have commenced a level to unite the old workings of the Loreto Mine with this sett, and which will effectually ventilate the mine.

Veta Bella.—The adit here has continued without anything worthy of notice. The Voladero shaft has been cleared out, and is 103 varas deep, the lowest part being in the Rayas lode, from which assays have been taken, but they do not reach 2 marcs per monton. In Pozo Rico nothing has occurred worthy of notice.

P.S. A report has just been brought me, that a vein joins the Buen Suceso lode in the San Francisco end, and that the band of good ore has increased to a foot in width, the quality being very superior; I hope it is not merely a bunch, limited to the junction of the two veins.

REAL DEL MONTE MINING COMPANY.

Mineral del Monte, June 22.—In consequence of the favourable results of the experiment on the Espiquela ore, I ordered new furnaces to be built, and have also arranged to erect a new dry stamps with twelve heads; by this means Sanchez hacienda will beneficiate about 180 cargas of Espiquela ores per week, which is nearly as much as the two furnaces are capable of calcining; the stamps can, of course, grind much more if required. The expense of these works will be about $1000, and they will be completed in about five or six weeks. Respecting the La Luz ore, the bad results of the two last tortas confirm the opinion that it is unfit for the common process of amalgamation. I have, therefore, ordered the reduction on a large scale to be suspended for the present. Several experiments are in hand, and I have great hopes that we shall obtain better results. The great importance of this subject will be better understood when I inform you that the quantity of colorado and black ore already discovered and laid open on the Santa Brigida vein, containing an average ley of ten marcs per monton, would supply an hacienda for a year with 600 cargas, or more, weekly, and the ore being soft, it can be raised at a very moderate expense, say 4 reals per carga. Finding the additional 8-inch lift insufficient to drain the water from Terreros, a 9-inch lift was put in, and the water on the morning of the 21st inst., was ten feet below Sorcava level, and twelve barrateros sup'd to work the ore ground in the stopes east and west of San Albino winze. The holding up of San Francisco shaft goes on favourably, and we shall, in the course of a few weeks, be enabled to commence some very important trials of the vein in this neighbourhood; towards the east we propose to clear the fifty vara level, and an old winze called El Arco; westward, where there is such a large piece of unwrought ground, we think of driving two levels, one at thirty seven, and one at sixty varas below the adit. At San Cayetano I expect the shaft will soon be dry, which I am anxious to see, on account of a small branch of very rich smelting ore we discovered in the 177 vara level, east of shaft, some nine or ten years ago, when we were unable to follow it on account of the water. The branch of ore is from five to six inches wide, and from three to five varas in length, and it never extended upwards more than two or two and a half feet above the bottom of the level. At Sacramento we were a little disappointed in the beginning of the month, owing to the failure of the smelting ore in the new winze of San Miguel, below the forty vara level, but last week another bunch was discovered in the bottom of the same level, about five varas further north. In the present end of the forty vara level north, the lode is six varas wide, of azogues, assaying from eight to twelve marcs, and yesterday two large heaps assayed eighteen and twenty-three marcs per monton; the smelting ore is a branch about a foot wide on the upper wall, or western side of the vein. At Acosta the prospects have not varied materially; there is still a large quantity of good azogue ores in sight, and the raising will continue for some time to come, about 300 or 350 cargas per week. At Escobar the lode in both ends of the twenty two vara level is large and promising, and produces good stones of ore; about five quintals were picked out during the last fortnight. The statement of costs and returns for May shows a profit of $6639, and for June I expect the returns will be two or three bars more than the estimate, say about fifty seven. By the July packet we purpose sending home 150 bars of silver, being the produce of part of April thirty-five bars, May fifty-five, and June and part of July sixty. The costs are still very heavy, although the drainage and surface expenses are much reduced, the charges will, after a while, be still further reduced, but the heavy charges of tutwork and charges on ores must be dealt with cautiously. The costs of haciendas is what swells the total to such an enormous amount, and until the ores are reduced with a less loss of quicksilver, it will always be very heavy. Many obstacles, such as the water at Terreros, bad beneficio of Sacramento ores, &c., have presented themselves, which have tended for the present to damp our expectations of early profits; I entertain sanguine hopes, however, that we shall soon be in better circumstances, and that the profits will be good and constant.

ANGLO-MEXICAN MINING COMPANY.

Guanaxuato, June 17.—The mine of Asuncion, I am sorry to say, has been constantly declining in respect of produce, and is now at a very low ebb, but I am looking daily for payable ore in the level of the cross-cut of San Andres. By the end of next week I hope to have concluded a railway in the level of San Gregorio, besides such improvement as may take place in the workings themselves. The clearing of Remolinos has been suspended, broken ground having been met with. Some thirty or forty varas further would, probably, bring the mine into, or below, the old workings of Vincente, which are of high traditionary repute. This level of San Andres has been driven 8¼ varas, and though its assays have not hitherto given much encouragement, the matrix so much improves that there is no doubt of meeting shortly with a deposit of ore. The mine of La Luz continues to prosper, and will not long delay paying dividends. Valenciana is losing money, but a fresh attempt will be made to revive it. The company's haciendas continue in nearly full employment. — HOFFAY.

N.B. Possession of the new ground solicited by me in December last, was given on the 30th ult., which has doubled the quantity of ground originally granted, and opened a fresh field for speculation, which ultimately will, it may be hoped, remunerate the company's perseverance in this quarter.

IMPERIAL BRAZILIAN MINING ASSOCIATION.

Gongo Soco, May 22.—By the gold returns you will see that no improvement has taken place in the produce. In the different parts of the mine no change for the better has taken place since my last. The workings in the sixty-two fathom level have been discontinued the last few days, while the launders (which had decayed) were being replaced. At the Camara mine an old cross-cut, commenced many years since, is now being continued, but the ground requires blasting, and is hard to drive. I proceed to-morrow to Cata Preta with Capt. Blamey to examine and fix on the best spot for erecting the stamps, and commencing operations, so that no delay may occur in working the quartz lode. J. K. A CRICKETT.

Gold return to June 1st—stamps, 222 lbs. 5 oz. 14 dwts. Total 242 lbs. 10 oz. 8 dwts. 12 grs.

NEW GRANADA MINING COMPANY.

[We last week published the proceedings of the annual general meeting of this company, with documents presented thereat; the following report, addressed by Mr. Hopkins to the chairman, is particularly worthy the attention of the shareholders.]

London, July 31.—Your favour of the 28th inst. has been duly received, and, in reply, beg to state, that I am still of the same opinion respecting the capabilities of the Santa Ana mine as when I replied to your queries in August last. Nothing has occurred since to cause the slightest deviation; on the contrary, we find, on perusing the last advices, dated Santa Ana, 6th of May, that no material change had taken place in the mine, excepting for the better in the twenty-four fathom level.

It appears that the great mass of poor ores, which they are obliged to extract to obtain the rich strings for the dry stamps, are still accumulating, and, therefore, continue unproductive. This is a serious drawback to the concern, inasmuch as it obtains only half the produce of the mine. The reason of such accumulation is, the want of means to treat it. Arrangements were being made to treat a part of this mineral, but they are by no means sufficient for the quantity the mine is now producing, much less for the quantity the mine is capable of supplying; therefore, some more effective, economical, and not subject to the losses which are sustained by the ordinary, method of concentration must be adopted, so that the establishment may have the full benefit at once of its daily produce. In my query, No. 5, you will find, that I recommended to concentrate the ore for the amalgamation to 140 oz. per ton, or upwards, when the nature of the ore admitted. I found that the cost and loss per ton, in the amalgamation treatment, were nearly the same, whether the ore treated be 70 oz. or 140 oz. per ton. On reference to late advices, it will be found that Mr. Treherne states the same fact. This desirable degree of concentration cannot always be effected, owing to the mineral being too much disseminated in the rock; and if submitted to the ordinary modes of water concentration, a very heavy loss would be sustained, from the running stream carrying away the lighter particles of silver—consequently, mineral of 70 oz. per ton is often treated. If means were adopted to concentrate the dry stamps ore to the constant value of 140 oz. per ton, economically and expeditiously, without incurring the usual heavy losses in the running streams, the saving to the establishment, even in treating the quantity they do at present, would be very considerable. Suppose, for instance, there be treated, or, rather, dry stamped, for the amalgamation—

50 tons, at 70 oz.	oz. 3500		
Loss per ton in amalgamation	600—2900		
Deduct amalgamation cost per ton, 22 oz.	1100		
Total surplus from the amalgamation		——	1800
Were the above concentrated to 25 tons, at 140 oz.	oz. 3500		
Loss per ton in the amalgamation, 12 oz.	300—3200		
Amalgamation cost per ton, 22 oz.	550		
Total surplus from the amalgamation		——	2650
Difference in favour of the concentration			850 oz.

Allowing 4 oz. per ton (100 oz.) to be left in the residue, and 150 oz. towards the labour attending the concentration, and say 100 oz. towards extras in the amalgamation, there would be still a saving of 500 oz., which, in such a small amount of produce, is a considerable item. I sincerely trust that the application of the new dressing machine will effect this desirable object, and thus enable the establishment to become at once in a satisfactory state.

The Mine.—It appears, from the want of a pump, little has been done towards developing the western lode in the fifty fathom level; and, in consequence of the men being employed in making temporary arrangements for pumping, Stephenson's shaft has been almost suspended. This important shaft, situated as it is in the very centre of the bunches of ore, should be pushed on as speedily as possible—to facilitate the extraction, diminish the cost, avoid interruptions in the drawing, and lay open the following stations:—

South Side.	*North Side.*
* Eight fathom level.	Adit (north-west and north-east).
* Fourteen fathom level.	* Eight fathom level.
Twenty-four fathom level.	* Fourteen fathom level.
Thirty-two fathom level.	* Twenty-four ditto (north-east).
Forty fathom level.	Thirty-two ditto (north and north-east).
* Fifty fathom level.	* Forty fathom level.
	* Fifty fathom level.

Those marked * will be new stations.

It is very probable that the lode in the fifty fathom level will form one principal channel north of the [illegible]. As soon as the new lift is applied, Illingworth's shaft should be immediately sunk to the sixty fathom level. When the floor at Stephenson's shaft is made, and the drawing of the poor ores brought to a satisfactory state, I should recommend to open the old level leading to the thirteen fathom level (Fowler's shaft), and to open a corresponding one on the San Juan lode.—These stations will be capable of affording a great quantity of ores for dressing, and a fair proportion of rich strings; indeed, any quantity of wet-stamped ores (as they are commonly called) can be obtained; all that is required is, the means of making such ores available. J. HOPKINS.

THE CARBONIC ACID ENGINE.—Mr. Isham Baggs has now enrolled his specification for this new means of obtaining motive-power, in which it is stated—"that it consists in so constructing machinery, that suitable chemical matters may be employed to evolve carbonic acid gas, the pressure of which, acting against a piston in a suitable engine, produces motive-power, and the carbonic acid gas having been so employed, is allowed to pass from the cylinder into a vessel containing suitable chemical matters to absorb the carbonic acid, and thus destroy the force it previously possessed." To effect this, a portion of the super-sulphate of ammonia from one vessel, and the carbonate of ammonia from another, are simultaneously injected into a vessel called the "generator," from this union the whole of the carbonic acid contained in the carbonate of ammonia is given off with great force, and acts on the piston of the engine; having effected this, it is passed off by a pipe into a vessel containing a simple solution of ammonia, which quickly taking up the acid, reduces the pressure on that side the piston, and is ready to make up the loss in the vessel containing the carbonate of ammonia. By a suitable arrangement of apparatus, a perfect decomposition and recombination of the carbonate of ammonia goes on, exerting an enormous power, and, compared with steam, of scarcely any expense. We are not at present in possession of sufficient data to state the advantages obtained by this power, but shall, in a future Number, give a perfect illustration of the apparatus, with a detail of its power and cost.

CURRENT PRICES OF STOCKS AND SHARES.

STOCK EXCHANGE, Saturday morning, Twelve o'clock.

Consols Money, 94¾ ⅞	Brazil, 5 per Cent., 79 2
Consols Account, 94¾ ⅞	Danish, 3 per Cent., 85½ 6¼
New 3½ per Cents., 101⅞ ⅞	Dutch, 2½ per Cent., 51⅞ 5
Reduced 3 per Cents., 94¾ 5	Ditto, 5 per Cent., 100⅞ ⅞
Reduced 3½ per Cents., 102½ ⅞	Portuguese, Conv., 5 per Cent., 41⅞ 2¼
Long Annuities, 12 11-16 ⅞	Russian, 5 per Cent., 115a 16¼
Bank Stock, 161¾ 3¼	Spanish, Actives, 5 per Cent., 18⅞ ⅞
Exchequer Bills, 59 61 pm.	Ditto, 3 per Cent., 35¼ ⅞
Belgian Bonds, 5 per Ct., 103¾ 4¼	Chili, 6 per Cent., 99 100

The premium on gold at Paris is 13½ per mille, which, at the English Mint price of 3*l.* 17*s.* 10½*d.* per ounce for standard gold, gives an exchange of 25 40, and the exchange of Paris on London at short being 25 62, it follows that gold is 0·54 per cent. dearer in London than in Paris.

By advices from Hamburgh the price of gold is 439 per mark, which, at the English Mint price of 3*l.* 17*s.* 10½*d.* per ounce for standard gold, gives an exchange of 13 13, and the exchange at Hamburgh on London at short being 13 13¼, it follows that gold is 0·09 per cent. dearer in London than in Hamburgh.

The course of exchange at New York on London is 108¾ per cent., and the par of exchange between England and America being 109 23-40 per cent., it follows that the exchange is 1·0 per cent. against England. But the quoted exchange at New York being for bills at 60 days' sight, the interest must be deducted from the above difference.

[*From our own correspondents.*]

LATEST PRICES OF IRISH STOCKS.—3 per Cent. Consols, 93¼*l.* to 93⅞*l.*; 3½ Stock, 100⅞*l.*; ditto New, 1830, 101¾*l.*; 3½ per Cent. Debentures, 94*l.*; Bank Stock, 179¾*l.*—Kingstown Railway, 111*l.*; Dublin and Drogheda, 94¾*l.*—Hibernian Bank, 39½*l.*, Royal Bank, 10¾*l.*; Provincial Bank, 40*l.*—City of Dublin Steam Co., 98*l.*; ditto Stock, 100*l.*, 0*d.*—Steam Ship Building Company, 46*l.*; British and Irish ditto, 5*l.*—National Insurance Company, 3¼*l.*; Patriotic, 8*l.*—Mining Company of Ireland, 12¾*l.*; Wicklow Copper Mines, 13¾*l.*

LEEDS, THURSDAY.—The attention of all parties connected with railways, seems to be so entirely absorbed as to the result of the different meetings held this week, that we have only the opportunity of attaching our quotations, viz.:—North Midland 72*l.*; York & N. Midland, 100*l.*; Leeds and Selby, 100*l.*; Hull and Selby, 41¾*l.*; Gt. North of England, 73*l.*; Manchester and Leeds, 89*l.*; Sheffield and Rotherham, 34*l.*; Edinburgh and Glasgow, 50¼*l.*; Bristol and Exeter, 53*l.*; Cheltenham and Great Western, 38*l.*; Northern and Eastern, 3¼*l.*—Leeds Banking Company, 15*l.*; Leeds and West Riding, —*l.*; Leeds Commercial, —*l.*; Yorkshire District, 5*l.*—Leeds and Liverpool Canal, 560*l.*; Huddersfield, 13¾*l.*; Rochdale, 69*l.*—Leeds and Yorkshire Assurance Company, 14¾*l.*—Leeds Old Gas Company, —*l.*; Leeds New Gas Company, 17¾*l.*—Leeds Commercial Buildings, 2*l.* R. B. WATSON & CO.

HULL, THURSDAY.—We hand you the following as our latest prices:—Birmingham & Derby, 4¾*l.* to 4¾*l.*; Edinburgh and Glasgow, 50*l.* to 51*l.*; Great North of England, 60*l.*; Hull and Selby, 41*l.* to 42*l.*; Leeds and Selby, 100*l.* to 110*l.*; London and Birmingham, 214*l.*; Liverpool and Manchester, 190*l.* to 200*l.*; London and Brighton, 53*l.*; Manchester and Leeds, 7*l.* to 9*l.*; Midland Counties, 7*l.*; Newcastle and Carlisle, 80*l.*; Northern and Eastern, 54*l.*; North Midland, 71*l.*; South Eastern, 25*l.*; York and North Midland, 10½*l.*—Yorkshire District Bank, 7¾*l.*; Hull Banking Company, 6*l.* to 6¼*l.*—Hull Dock Company, 101*l.*; Hull Gas, 20¾*l.* to 21*l.*; Hull Flax and Cotton Mills, 10¾*l.*; Hull Marine Insurance, —*l.*

BRISTOL, FRIDAY.—Our market has been active this week, and considerable business done in railway shares; we close firm:—Great Western Railway, 94¾*l.* to 95¾*l.*; ditto, halves, 67*l.* to 67¾*l.*; ditto, fifths, 16¾*l.* to 17*l.*; Bristol and Exeter, 58¾*l.* to 59*l.*; Bristol and Gloucester, 23*l.* to 25*l.*; Birmingham and Gloucester, 52*l.* to 54*l.*; Birmingham and Derby, 4*l.* to 4*l.*; Cheltenham Union, 17¾*l.* to 20¾*l.*; London and Brighton, 5*l.* to 54¾*l.*; Eastern Counties, 9¾*l.* to 9*l.*; Taff Vale, 30*l.* to 3*l.*—Bristol Gas Company, 3*l.* to 35¾*l.*; Clifton, 33¾*l.* to 30¾*l.*

GLASGOW, THURSDAY.—Ballochney Railway, 70*l.*; Dundee and Arbroath, 20*l.*; Edinburgh and Glasgow, 50¾*l.*; Garnkirk and Glasgow, 36¾*l.*; Glasgow and Greenock, 15*l.*; Glasgow, Paisley, Kilmarnock, and Ayr, 3*l.*; Monkland and Kirkintilloch, 40*l.*; Slamannan, —*l.*; Wishaw & Coltness, 8*l.*—Forth and Clyde Canal, 12*l.*—Bank of Scotland, 16*l.*; Royal, 161¾*l.*; British Linen Company, 21*l.*; Commercial, 150*l.*; Glasgow Union, 6*l.*—North British Fire and Life Insurance, 18¾*l.*; Caledonian Fire and Life, 14¾*l.*; Scottish Marine, 3*l.*—Royal Exchange, 4*l.*—Old Clyde Shipping Company, 30*l.*—Shotts Iron Company, —*l.*

SUNDERLAND, THURSDAY.—Sunderland Joint Stock Bank, 5*l.*; North of England, 5*l.*; Newcastle, Shields, and Sunderland Union, 6*l.*; Northumberland and Durham District, 6¾*l.*; Newcastle Commercial, 8*l.*; Newcastle Joint-Stock, 2*l.*; Stockton and Durham County, 4*l.*; Darlington District, —*l.*; Carlisle City and District, 20*l.*; Carlisle and Cumberland, —*l.*—Durham and Sunderland Railway, 10*l.*; Brandling Junction, 20*l.*; Newcastle and North Shields, 20*l.*; Newcastle and Carlisle, 70*l.*; Stockton and Darlington, 201*l.*; Hartlepool Dock and Railway, 100*l.*; Great North of England, 9*l.*; Clarence, 15*l.*; Hartlepool and Stockton, 3*l.*—Newcastle Union Shipping Company, 2*l.*; Port of Newcastle General, 1¾*l.*; Gateshead and Tyne, 12¾*l.*; North and South Shields Steam Ferry, 110*l.*—Sunderland Subscription Gas Light Company, 15*l.*; Sunderland Joint-Stock Premium Association, 5¾*l.*; Sunderland Exchange, 23*l.*; Bishopwearmouth Water-works, 30*l.*; Sunderland Arcade Building, 4*l.*; Sunderland Custom-house, 3*l.*; Monkwearmouth Docks, 28*l.*; Durham County Coal Company, 2¾*l.*; Monkwearmouth Gas Company, 14*l.*; Newcastle Subscription Water Company, 30*l.*; Newcastle and Gateshead Union Gas, 7*l.*; Newcastle Marine Insurance, 4*l.*; Newcastle Commercial ditto, 1¾*l.*; Northern Coal Mining Company, 1*l.*

MANCHESTER, THURSDAY.—Birmingham and Derby Railway, 4*l.*; Birmingham and Gloucester, 5*l.*; Bristol and Exeter, 5*l.*; Cheltenham & Great Western, 36¾*l.*; Chester and Birkenhead, 16¾*l.*; Eastern Counties, 9*l.*; Edinburgh and Glasgow, 5¾*l.*; Grand Junction, 198*l.*; Great North of England, 6*l.*; Great Western, 9*l.*; Hull and Selby, 4*l.*; Lancaster and Preston, 33¾*l.*; Liverpool and Manchester, 200*l.*; London and Birmingham, 210*l.*; London and South Western, 65¾*l.*; Manchester and Birmingham, 35¾*l.*; Manchester, Bolton, and Bury, 30¾*l.*; Manchester & Leeds, 9¾*l.*; Midland Counties, 71*l.*; North Midland (Leeds to Derby), 72*l.*; Sheffield and Manchester, 39¾*l.*; York and North Midland, 100*l.*—Manchester and Liverpool District Bank, 1*l.*; Manchester and Salford, 11¾*l.*; Union of Manchester, 7¾*l.*—Manchester Fire and Life Assurance, 16¾*l.*; Manchester and Salford Water Works, 5¾*l.*

BIRMINGHAM, THURSDAY.—London and Birmingham Railway, 210*l.* to 214*l.*; London and Brighton, 5*l.* to 54*l.*; London and South Western, 6*l.* to 65¾*l.*; Great Western, 9*l.* to 9*l.*; Birmingham & Derby, 4*l.* to 4*l.*; Birmingham & Gloucester, 5*l.* to 5*l.*; Manchester and Leeds, 7*l.* to 9*l.*; Edinburgh and Glasgow, 5*l.* to 5*l.*—Birmingham Banking Company, 13¾*l.*; District, 6¾*l.*; Midland, 5*l.*—Birmingham Canal, 10*l.*; Birmingham and Worcester, 5*l.* to 5*l.*; Birmingham Water-Works, 9¾*l.*; Birmingham Gas, 11*l.*; Birmingham and Staffordshire, 5*l.* to 5¾*l.*; Old Union Mill, 5*l.*; New ditto, 1¾*l.*

THE LONDON GAZETTE—BANKRUPTS.

TUESDAY.—E. Wills and E. Oare, Oxford-street, drapers—C. Dick, jun., Leadenhall-street and elsewhere, ship broker—H. W. Beard, Little Exchange-street, Mayfair, cook—W. Gearing, jun., Greenbank, Wapping, tallow chandler—W. Smithson, Thirsk, Yorkshire, scrivener—G. Savage, Sheffield, razor manufacturer—J. B. Daw and W. H. Dustick, St. Thomas the Apostle, Devonshire, coal merchants—T. Parry, Mold, Flintshire, draper—S. Bourton, W. Greenback, T. Bourton, and J. Dawsall, Tunstall, Staffordshire, china manufacturers.

FRIDAY.—J. Marriage, jun., Moulsham, Essex, miller—C. J. Spencer, Carlisle, upholder—W. Humphreys, Brighton, wine merchant—A. Harris, Chichester, hotel keeper—W. B. Anglebe, Boston, Lincolnshire, coach builder—G. Barton, Ashton-under-Lyne, brick maker—J. Broadhead, Almondbury, Yorkshire, woollen cloth manufacturer—H. W. Drowse, Pudsham, Yorkshire, victualler—E. Warner, E. Warnett, T. Manning, and J. Manning, Liverpool, brandy dealers—B. Watson, York, silk mercer.

COAL MARKET, LONDON.

MONDAY.—Prices of coals per ton at the close of the market:—[illegible]

WEDNESDAY.—[illegible]

FRIDAY.—[illegible]

PROMISSORY NOTES AND BULLION.—An account of the average aggregate amount of promissory notes, payable to bearer on demand, which have been in circulation in the United Kingdom, distinguishing those circulated by the Bank of England, by private banks, and by joint-stock banks, in England and Wales, by the banks in Scotland, by the Bank of Ireland, and by all other banks in Ireland, and of the average amount of bullion in the Bank of England, during the four weeks ending the [illegible] day of July, 1843:—ENGLAND: the Bank of England, [illegible]; private banks, [illegible]; joint-stock banks, [illegible].—SCOTLAND: chartered, private, and joint-stock banks, [illegible].—IRELAND: Bank of Ireland, [illegible]; private and joint-stock banks, [illegible].—Total, [illegible]. Bullion in the Bank of England, [illegible]. HENRY L. WICKHAM.

Stamps and Taxes, Aug. 8.

NATIONAL DEBT.—The Lords Commissioners of Her Majesty's Treasury having certified to the Commissioners for the Reduction of the National Debt, in pursuance of the act 10th George IV., c. 27, sec. 1, that the actual expenditure of the United Kingdom of Great Britain and Ireland exceeded the actual income thereof, for the year ended the 5th day of April, 1843, by the sum of [illegible], the Commissioners for the Reduction of the National Debt hereby give notice, that no sum will be applied by them on account of the Sinking Fund, under the provisions of the said act, between the 7th day of July, and the 10th day of October, 1843.

National Debt Office. S. HIGHAM, Comptroller General.

SALE OF COPPER ORES IN CORNWALL.

Sampled July 26, and sold at Andrew's Hotel, Redruth, August 10.

Mines.	Tons.	Price.	Purchasers.	Mines.	Tons.	Price.	Purchasers.
Carn Brea	124	£4 16 0	English Co.	Fowey C.	86	5 5 6	Nevill & Co.
ditto	87	4 8 6	—	ditto	80	5 11 0	Williams.
ditto	84	4 4 6	—	ditto	81	5 1 6	Freemans.
ditto	77	6 9 6	—	Botallack	53	16 13 6	Vivians.
ditto	76	5 9 6	—	ditto	50	9 7 6	—
ditto	61	2 4 6	—	ditto	47	6 19 6	—
ditto	24½	7 16 4	—	ditto	46	10 5 6	English Co.
ditto	24½	7 16 6	Mines Royal	ditto	42	10 6 6	Freemans.
ditto	56	2 3 0	English Co.	Brewer	79	5 5 6	Williams.
ditto	35	6 19 6	—	ditto	64	5 3 6	—
Friendship	15	3 7 6	Nevill & Co.	ditto	61	5 15 6	—
ditto	71	3 7 6	—	Darlington	85	4 6 6	—
ditto	40	3 12 6	—	ditto	64	5 13 6	—
ditto	37	2 10 7	Freemans.	ditto	37	1 19 6	—
Prosper	40	3 13 6	Nevill & Co.	ditto	1	45 10 6	—
ditto	40	3 13 0	Williams.	Levant	54	19 2 6	Vivians.
ditto	41	3 11 6	Nevill & Co.	ditto	39	4 17 0	English Co.
ditto	38	7 8 6	Vivians.	ditto	14	24 10 0	Vivians.
Wh. Virgin	92	4 13 6	Williams.	Provid. M.	58	4 17 6	Williams.
ditto	77	6 13 0	Freemans.	ditto	30	4 9 0	—
ditto	75	5 19 6	—	Trenow C.	39	5 16 6	Freemans.
ditto	67	1 17 0	Williams.	ditto	21	11 8 6	—
ditto	56	4 12 6	—	ditto	10	8 9 6	—

TOTAL PRODUCE.

Carn Brea	620	£3130 15 0	Brewer	187	1056 4 6
Wh. Friendship / Wh. Prosper	433	1647 3 6	Wh. Darlington	187	826 17 6
Wh. Virgin	353	1710 13 6	Levant	107	1079 18 0
Fowey Consols	250	1314 17 6	Providence M.	88	416 5 0
Botallack	238	2382 11 6	Trenow Consols	69	454 18 0

Average standard, 105*l.* 7*s.*—Average produce, 7¾.—Average price, 5*l.* 8*s.* 6*d.*—Quantity of ore, 2564 tons.—Quantity of fine copper, 202 tons 7 cwt.—Amount of money, 13,862*l.* 19*s.* 0*d.*—Average standard of last sale, 106*l.* 11*s.*—Average produce, 7¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	24¾	£213 0 3
English Copper Company	715¾	3684 7 9
Vivian and Sons	256	2320 6 6
Freeman and Co.	364	2302 3 6
Sims, Willyams, Nevill, Druce, and Co.	4?0	1458 13 0
Williams, Foster, and Co.	800	3697 6 0
Total	2564	£13,862 19 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Tresavean, 4?1; Fowey Consols, 294; Wheal Providence, 36?; Holmbush, 201; Par Consols, 177; Wheal Gorland, 1?6; Penstruthal, 64.—Total, 15?? tons.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—United Mines, 1253; North Downs, 230; Tretheilan, 120; Fowey Consols, 214; West Caradon, 102; Tresavean, 151; Creegbraws, 94; Treleigh Consols, 92; Wheal Mosser, 41; Wheal Burrow, 32.—Total, 2?33 tons.

SALE OF COPPER ORES AT SWANSEA.

Sampled July 19, and sold on the 9th August.

Mines	Tons	Produce	Stand.	Price	Mines	Tons	Produce	Stand.	Price
Santiago	121	16	87⅞	11 16 0	Cobre	109	14	89	10 4 0
ditto	120	16	87⅞	11 16 0	ditto	103	22	84½	16 2 0
ditto	96	16	87⅞	11 16 0	ditto	91	13¾	87	9 8 0
ditto	90	16	87⅞	11 16 0	ditto	90	13¾	88⅞	9 8 0
ditto	74	15⅞	89⅞	11 16 0	ditto	40	22	85⅞	16 3 0
ditto	97	24⅞	84	18 6 0	Valparaiso	100	22⅞	85⅞	16 5 6
ditto	93	24⅞	80⅞	19 3 0	ditto	98	22⅞	87⅞	16 5 6
ditto	91	24⅞	80⅞	19 3 6	ditto	40	25	87⅞	18 15 0
ditto	87	23⅞	88⅞	17 9 0	ditto	28	40⅞	79⅞	29 16 0
ditto	62	23⅞	88⅞	17 9 0	ditto	19	44⅞	79	32 16 0
Chili	96	26	89⅞	19 8 0	Cronebane	65	6⅞	100⅞	4 5 6
ditto	52	40⅞	79⅞	29 4 6	ditto	39	6⅞	99⅞	4 9 6
ditto	49	37⅞	80	27 11 0	ditto	36	6⅞	103	4 1 0
ditto	49	33⅞	79⅞	20 15 0	ditto	15	5⅞	100⅞	3 10 0
ditto	47	30	80	22 0 0	ditto	10	5⅞	102⅞	3 6 0
ditto	42	32⅞	82	24 0 0	ditto	6	6⅞	102	4 2 6
ditto	40	37⅞	80	27 11 0	Tigrony	94	5⅞	108⅞	3 16 0
ditto	14	53⅞	75	39 4 0	ditto	28	5⅞	106⅞	3 7 0
ditto	6	55	76⅞	41 4 0	ditto	13	4⅞	107⅞	3 0 0
ditto	44	40⅞	79	30 4 0	Bearhaven	123	10⅞	92⅞	7 7 6
ditto	47	40	79	31 15 0	ditto	77	10⅞	93	7 8 0
ditto	45	34⅞	77⅞	25 4 0	Llandidno	97	12⅞	96⅞	9 14 0
ditto	19	30	79	20 0 0	Ballymurtagh	45	4⅞	112⅞	2 16 0
ditto	74	21	84⅞	16 3 6	ditto	26	4⅞	112⅞	2 16 0
ditto	63	23⅞	83⅞	16 6 6	Cuba	54	13⅞	85	14 4 6
ditto	10?	10	91	10 8 0	ditto	13	17⅞	89⅞	12 15 6
Knockmahon	103	9⅞	94⅞	7 1 0	ditto	6	17⅞	89⅞	12 9 6
ditto	101	6⅞	100⅞	4 11 0	Cosheen	66	7	108	4 15 0
ditto	100	11	99	7 10 0	ditto	4	10⅞	96⅞	7 4 6
ditto	61	4⅞	102⅞	3 10 0	Cuba	36	14⅞	90	11 16 6
ditto	40	6⅞	102	4 7 6	Lackamore	41	12⅞	93	9 17 6
ditto	64	7⅞	97	4 16 6	North Molton	14	13⅞	93⅞	10 14 0
ditto	41	10⅞	90⅞	7 9 6	Midland	1	7⅞	96⅞	5 0 0

Total tons, 3206.—Total amount, £57,053 3 6

TOTAL PRODUCE.

Santiago	874	£13581 1 6	Llandidno	97	£943 16 0
Chili	793	19424 1 6	Ballymurtagh	71	326 16 0
Knockmahon	481	3000 6 6	Cuba	73	1?10 1 6
Cobre	442	5262 17 6	Cosheen	70	347 8 6
Valparaiso	185	3406 17 6	Cuba	36	647 12 6
Cronebane	167	731 11 6	Lackamore	41	263 17 6
Tigrony	135	480 6 6	North Molton	14	149 16 0
Bearhaven	200	1457 13 6	Midland	1	5 0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
English Copper Company	479	£7194 17 6
Freeman and Co.	178	2010 4 6
Grenfell and Sons	735	10213 5 6
Crown Copper Co.	34	161 5 9
Sims, Willyams, Nevill, Druce, and Co.	1?4	1703 4 6
Vivian and Sons	809¾	11222 4 6
Williams, Foster, and Co.	1419	10917 14 6
Mines Royal Company	94¾	2081 2 9
Total	3206	£57,053 3 6

Copper ores for sale August 23.—Cobre 11¾, ditto 93, ditto 90, ditto 72, ditto 47, ditto 29, ditto 121, ditto 113, ditto 190, ditto 67—Chili 100, ditto 71, ditto 60, ditto 10, ditto 41, ditto 30, ditto 47, ditto 4, ditto 3, ditto 21, ditto 40—Santiago 120, ditto 100, ditto 93, ditto 97—Knockmahon 112, ditto 91, ditto 57, ditto 56, ditto 47—Ballymurtagh 79, ditto 58, ditto 25, ditto 11—Bearhaven 92, ditto 41—Valparaiso 90, ditto 59—Mt. San Fernando 79, ditto 47—Llandidno 20.—Total, 2822 tons.

WORK PERFORMED BY CORNISH ENGINES.

The number of pumping engines reported for the month of July is 38—the quantity of coals consumed being 3100 tons, lifting, in the aggregate, 14,000,000 tons of water 10 fathoms high—the average duty of the whole is, therefore, 54,000,000 lbs. lifted 1 foot high by the consumption of a bushel of coal.

SALE OF BLACK TIN,

By Ticket, on the 8th of August, at Truro.

Mines.	Tons.	Price.	Amount.	Purchasers.
Treruid	6	£51 12 6	—	Bolitho Co. and Williams Co.

LATEST CURRENT PRICES OF METALS.

LONDON, AUGUST 11, 1843.

	£ s. d.		£ s. d.
SPELTER—Foreign, ton	0 0 to 21 0 0	COPPER—Old, per lb.	0 0 0
For delivery	0 0 0 22 0 0	Cake p. ton 79 0 0 to	79 0 0
ZINC—English sheet	0 0 0 21 0 0	Pot. cake	0 0 0 to —
QUICKSILVER	per lb. 0 4 0	do. 77 0 0 to	79 0 0
IRON—English bar, &c.	p. ton 4 12 0	TIN—English, blocks, &c. cwt.	0 0 0
Nail rods	0 0 0	bars	0 0 0
Hoops	0 0 0	Foreign, Banca	3 17 0 3 18 0
Sheets	7 10 0	Straits	0 0 0 3 15 0
Cargo in Wales	0 0 0 4 0 0	Peruvian	0 0 0
Pig, No. 1, Wales	0 0 0 3 0 0	Tin plates, No. IC. p. box	1 8 0 1 7 0
No. 1, Clyde	0 0 0 1 10 0	No. IX.	1 0 0 1 10 0
Do., Swedish	0 0 0 0 10 0	wasters 2s. p. box less	
Russian, CCND	—	LEAD—Sheet milled, p. ton	18 10 0
.. PSI	—	Pig, patent 18 10 0	19 0 0
.. Gourieff	—	Red	—
.. Archangel	—	White	—
STEEL—Swedish keg	p. ton 16 0 0	PIG LEAD—English	0 0 0 16 0 0
Faggot	0 0 0 16 10 0	Spanish	15 15 0 16 0 0
COPPER—English sheathing	lb. 0 0 8½	American	0 0 0 15 0 0

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the week ending Thursday last:—

Silver coin to Hong Kong and Macao	58,322	ounces.
Silver coin to Calais	10,000	..
Silver bars to ditto	110,000	..

Silver coin and bullion shipped at Dover, for Calais, in the month of July—Silver, 165,100 oz.; gold, 5?? oz.

[*From the Midland Counties Herald of Thursday.*]

The market for metals does not improve in any material degree, though it is rumoured that there are speculative orders for cargo iron at the present prices in Wales. Excepting occasional sales of spelter, there is only a retail business in other metals at unvarying rates.

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price
500	Anglesey	5	—
4,000	Bedford	2	3¼
100	Botallack	175	200
20,000	British Iron	70	—
8,000	Blaenavon	50	—
120	Brewer	—	100
70	Bodmick	—	5
1,000	Carn Brea	15	130
5,000	Con. Tretoil Mining Ass.	4	⅞
2,000	Cornubian Lead Co.	3	4¼
512	Cook's Kitchen	—	40
112	Charlestown	—	250
120	Cragg Braws	80	325
128	Cooberw	15	130
10,000	Durham County Coal Co.	37	—
128	East Pool	—	170
100	Great Consols	97	300
10,000	Hibernian	12¾	7
1,000	Holmbush	14	37
2,000	Isle of Sark (Guernsey)	10	—
80	Levant	—	450
10,000	Mining Co. of Ireland	7	12¾
128	Mostyn Mines	100	—
70	North Roskear	—	300
4,000	North Tamar Consols	⅞	5¾
3,000	Polberrow Consols	10	—
128	Penstruthal	37	100
10,000	Rhymney Iron	50	4
1,000	Roaring Water	⅞	8
128	South Caradon	—	300
800	South Towan	10	1¾
64	South Wheal Basset	—	300
57	Spears Moor	70	—
1,000	Stray Park	40	25
135	Tregollan	—	2
4,000	Treleigh Consols	3¾	2¾
4,000	Tamar Consols	3	6¾
6,000	Tincroft	7	14
128	Trewavas	—	90

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price
170	Treviskey and Barrier	—	200
96	Tresavean	—	600
120	Tretheilan	—	210
4,000	United Hills	5	4
6,000	Wicklow Copper	5	13¾
3,843	West Wheal Jewel	10¾	15¾
120	West Tretheilan	5	60
53	Wheal Vor	300	—
128	Wheal Providence	16	100
1,000	Wheal Bandon	⅞	6
	Wheal Franco	15	35
1,000	West Carbery	⅞	12¾

FOREIGN MINES.

Shares.	Company.	Paid.	Price
5,000	Alten Mining Company	12¾	4¾
10,000	Anglo Mexican Co.	100	2¾
3,374	Do. Subscription	25	3
2,000	Bolanos	120	5⅞
	Ditto Scrip	15	4¾
10,000	Brazilian Imperial	21	7
10,000	Bolivar	20	—
10,000	Ditto Scrip	10	2
10,000	Cata Branca—Brazilian Company	8¾	4 5
12,000	Cobre Copper Company	40	23¾
6,100	Colombian Co. regis.	55	1¾
10,000	Copiapo Mining Co.	13¾	9
20,000	General Mining Asso.	20	6
3,351	Mexican Company	50¾	—
12,000	Mocnalbas and Cocoes	25	4¾
23,310	{ Rl. del Monte, regis. / Do. unregistered }	2?¾	{ 4 / 4¾
	Ditto Loan Notes	150	107¾
7,000	Royal Santiago	10	21
11,000	St. John d'el Rey	15	5¾
10,000	United Mexican	40	3
	Black Scrip, addl. capital	5	1¾
	Red New Scrip	1¾	2

RAILWAY SHARE LIST AND TRAFFIC RETURNS.

Line.	Entire Lgth.	Now Open.	Present actual cost.	Pd. on Share.	Val. of Share.	Last week's returns.
Arbroath and Forfar Railway	15	15	£ 136,700	25	22	—
Birmingham & Derby Junc.	48¾	48¾	1,149,010	100	45	1307 19 2
Birmingham and Gloucester	55	55	1,400,661	100	55	3132 5 5
Brandling Junction	25	25	434,924	50	—	657 10 5
Chester and Birkenhead	14¾	14¾	536,424	50	30	524 8 6
Dublin and Kingstown	6	6	340,262	100	107	—
Dundee and Arbroath	16¾	16¾	155,000	25	11¾	310 4 2
Durham and Sunderland	16	16	260,147	50¾	18	705 17 9
Eastern Counties*	51	51	2,400,000	25	9¾	3008 0 0
Edinburgh and Glasgow	46	46	1,313,087	50	50¾	2879 12 6
Glasgow and Ayr	51	51	900,304	50	40	1475 4 0
Glasgow and Greenock	22¾	22¾	730,288	25	25	1130 0 0
Gd. Junc. & Chester & Crewe	115¾	115¾	2,318,336	100	202	9785 3 10
Great North of England	74	45	1,301,671	100	67¾	1009 15 9
Great Western	118¾	118¾	6,340,623	65	90	16009 16 2
Hull and Selby	31	31	643,356	50	41¾	1179 7 2
Liverpool and Manchester	31	31	1,313,335	100	200	5080 19 3
London and Birmingham	117¾	117¾	5,927,672	100	216?	20128 0 10
London and Blackwall	3¾	3¾	1,220,375	14?	4¾	1340 13 10
London and Brighton	56	56	2,400,645	50	34¾	4717 13 7
London and Croydon	10¾	10¾	620,527	13¾	12	329 12 9¾
London and Greenwich	3¾	3¾	1,019,616	12¾	4	826 13 1
London and South Western	92¾	92¾	2,380,394	33¾	65¾	6121 17 6
Manchester, Bolton, & Bury	10	10	777,337	37	30	649 13 6¾
Manchester & Birmingham	40	31	1,926,605	40	34	2?26 0 0
Manchester and Leeds	50	50	3,430,206	70	79¾	5186 10 0
Midland Counties	57	57	1,624,140	100	68¾	3011 13 4
Newcastle and Carlisle	61	61	1,061,300	100	70	1397 1 4
Newcastle and N. Shields	7	7	312,478	45	44	436 13 11
Northern and Eastern†	32¾	32¾	969,687	45	54¾	1817 1 0
North Midland	72¾	72¾	3,322,581	100	72¾	5307 4 6
North Union‡	22	22	612,819	75	71	—
Paris and Rouen	—	84	1,120,000	20	27¾	3055 9 0
Paris and Orleans	—	82	2,082,380	20	20	4188 8 10
Preston and Wyre	15	19	317,000	50	36	435 19 9
Sheffield and Manchester	40	11	512,004	62¾	32¾	474 14 0
South Eastern	81	66	2,506,322	50	26¾	4001 14 0
Taff Vale	30	30	530,730	100	—	700 18 1
Ulster	25	25	344,313	25	—	477 3 4
York and North Midland	27	27	451,631	50	99	2035 19 5

* Including Northern and Eastern Railway toll. † Rent and toll to Eastern Counties (about 100*l.* per week) included in the returns. ‡ The Liverpool and Manchester toll is deducted.

THAMES TUNNEL.

The number of passengers who passed through the Tunnel in the week ending August 5, was 41,539, yielding a revenue of £169 14s. 9d.

JOINT-STOCK BANKS.

Shares.	Company.	Paid.	Price	Shares.	Company.	Paid.	Price
15,000	Australasia	40	33	50,000	Liverpool Borough	10	14¾
20,000	Birmingham	10	1¾	25,000	Ditto Bank of	12¾	30
20,000	British N. American	40	39	12,000	Ditto Banking Co.	10	8¾
10,000	Cheltenh. & Gloucesh.	5	17¾	50,000	Ditto Commercial	10	10
100,000	Commercial of Eng.	5	—	2,000	Ditto Royal	100	60¾
1,000	Commer. of London	200	14¾	100,000	Manch. & Liver. Dis.	15	10
50,000	Colonial	25	14¾	100,000	Manchester	10	4¾
50,000	East of England	10	7¾	50,000	Manchester & Salford	10	16
10,000	Gloucestershire	10	20	20,000	National of Ireland	17¾	14
4,000	Ionian	25	24	20,000	Natl. Provl. England	35	30
10,000	Leeds Banking Co.	15	14	60,000	North. & South Wales	10	6¾
20,000	Leeds & West Riding	6¾	9¾	20,000	Provincial of Ireland	25	41¾
50,000	London & Westminst.	20	23¾	20,000	South Lancashire	7¾	6¾
60,000	London Joint Stock	10	11	30,000	W. of Eng. & S. Wales D.	12¾	11
20,000	London and County	10	15	20,000	Union of Australia	20	20¾
10,000	Liverpool Albion	25	10¾	60,000	Union of London	10	8¾

MISCELLANEOUS.

Shares.	Company.	Paid.	Price	Shares.	Company.	Paid.	Price
10,000	Anglo-Mexican Mint	10	12¾	8,100	Hungerford Market	100	31¾
10,000	Anti Dry-Rot	18¾	2	100,000	Iberian Mercantile Co	—	1¾ 2
10,000	Asphalte (Claridge)	5	4	1,000	London Corn Exch.	37¾	35
10,000	Assam Tea Company	12¾	4¾	6,100	London Cemeteries	12¾	15
10,000	Austral. Agricultural	28?¾	19¾	5,100	London Cemetery	20	19
5,473	Australian Trust Co.	35	26¾	8,000	Lon. Rever. Int. Soc.	10	6
12,000	Bitumen Business	3¾	⅞	10,000	Met. Pat. Wood Paving	6	6¾
10,000	Ditto Policemen	2	⅞	20,000	Mexican & S. American	7	5
6,000	Brit. Amer. Land Co.	30¾	9	—	New Brunswick (Ld.)	60	15
4,000	Brit. Loan & Dis. Inst.	15	7¾	7,192	Peninsular & Oriental	20	5¾
6,000	Brit. Rev. & Pat. Salt	35	17	5,307	Rever. Int. Society	100	100
6,313	Canada Land Co.	32¾	4¾	13,000	Royal Mail Steam Pct.	50	12
3,000	E. C. of Can. Amr. Deb.	20	16	2,000	Shott's Iron Foundry	40	30
4,000	Droitwich Patent Salt	25	12¾	14,400	South Australian	50	17
2,700	Equitable Rever. Int.	45	61	2,000	Ship Owners' Towing	7¾	15
20,000	Gen. Steam Navig.	14	17¾	4,000	Thames Tunnel	50	6¾
5,000	Gen. Rever. Int. Soc.	100	110	10,000	Van Diemen's Land	18	5

CURRENT PRICES OF MATERIALS IN CORNWALL,

AS SUPPLIED AT THE PRINCIPAL MINES.

	s.	d.		s.	d.
Common iron, per cwt.	12	10	Barrow heads	7	06
Half-inch square	8	0	Sheet lead	20	0
Five-eighth ditto	7	0	White ground lead	35	0
Best tough whim chain	20	0	Red lead	18	0
Boiler plates	9	0	Tallow	45	0
Whim kibble ditto	12	0	Candles, per dozen lbs.	6	0
Hoop iron	8	0	Gunpowder, per 100 lbs.	40	0
Best rolled iron	4	0	Leather bends, per lb.	1	4
Charcoal iron	11	0	Ropes	28	0
Inch ditto	11	0	Flat ropes	30	0
Half inch ditto	13	0	Hemp	40	0
Blistered steel	35	0	White yarn, per cwt.	38	0
H ⅞ steel	30	0	White rope	30	0
Nail rods	11	0	English soap	6	0
Miners' shovels	30	0	Stockholm tar	25	0
Ditto steel pointed	30	0	Linseed oil, per gallon	3	0
Board nails	13	0	Rape ditto	4	0
Half-board ditto	14	0	Brass wire sieves	40	0
Hatch ditto	17	0	Iron wire ditto	20	0
Half-hatch ditto	20	0	Iron, wire work, per foot	1	0
Dr. nails	14	0	Machine buttons	1	0
Five inch collar ditto	22	0	Bark	1	0
Casting ditto	32	0	Birch, per foot	1	0
20 in. coils	18	0	Pins	45	0
16 ditto	18	0	Shovel hilts	1	0
Coals, per ton, at quay	0	0	Pick hilts	1	0

BANK OF ENGLAND.—Quarterly Average of the Weekly Liabilities and Assets from the 22nd of April, 1843, to the 15th of July, 1843, both inclusive:—

LIABILITIES.		ASSETS.	
Circulation	£19,388,000	Securities	£22,422,000
Deposits	13,756,000	Bullion	11,615,000
	£33,144,000		£34,037,000

(Downing-street, July 20.)

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